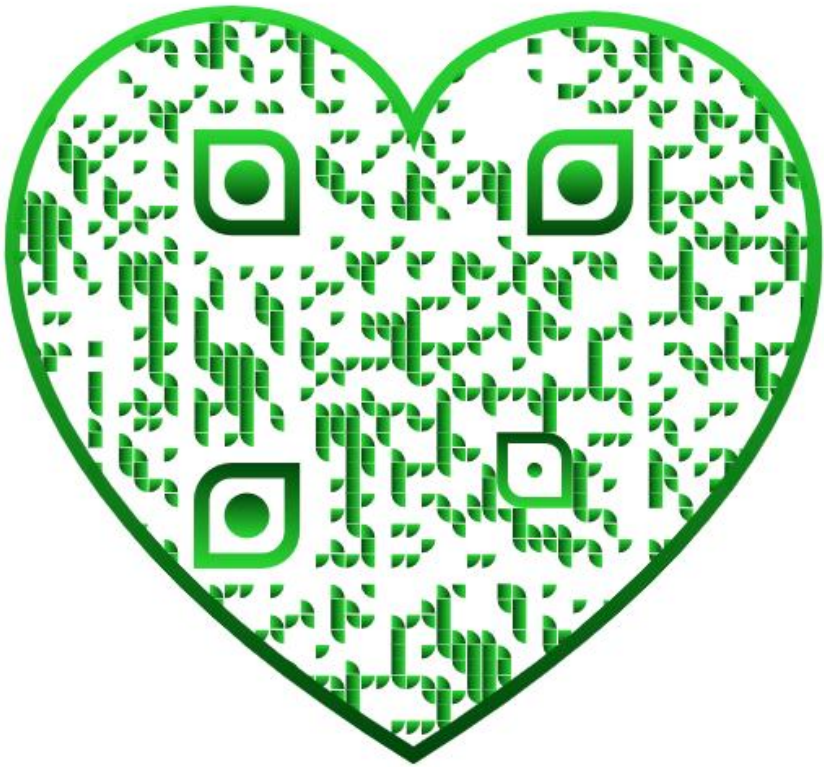
THE INTRUSIVE STATE &
HOW IT'S HURTING US

INDIA'S BIG GOVERNMENT

VIVEK KAUL
Foreword by Bill Bonner



THE INTRUSIVE STATE &
HOW IT'S HURTING US

INDIA'S BIG GOVERNMENT

VIVEK KAUL
Foreword by Bill Bonner

India's Big Government

The Intrusive State and How It's Hurting Us

— Vivek Kaul

Equitymaster Agora Research Private Limited

Published by Equitymaster Agora Research Private Limited.
103, Regent Chambers, Above Status Restaurant, Nariman Point,
Mumbai - 400 021. India • Telephone: +91-22-6143 4055 • Fax: +91-22-2202 8550.
Email: info@equitymaster.com • Website: www.equitymaster.com.

CIN:U74999MH2007PTC175407

India's Big Government: The Intrusive State and How It's Hurting Us

Copyright@2016, by Equitymaster Agora Research Private Limited

All rights reserved. No part of this publication may be reproduced or distributed in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise or stored in a database or retrieval system without the prior written permission of the publisher. Information contained in this work has been obtained by Equitymaster Agora Research Private Limited from sources believed to be reliable. However, neither Equitymaster Agora Research Private Limited nor its author guarantee the accuracy or completeness of any information published herein, and neither Equitymaster Agora Research Private Limited nor its author shall be responsible for any errors, omissions or damages arising out of this information. This work is not personalized investment advice nor any advisory services are being rendered through this work. If required, it is recommended to consult an appropriate investment adviser or financial planner.

SEBI (Research Analysts) Regulations 2014, Registration No. INH000000537

Cover Design and Cartoons: Manjul

Printed at: Kaleido Graphics, Mumbai • email: info@kaleidographics.com

Visit us at: www.equitymaster.com

Dedicated to my Grandparents

Rupa and Soom Nath Kaul
Prabha and Triloki Nath Raina

CONTENTS

Foreword

Introduction

1. Those were the Days, My Friend!

2. We have Spread Them too Wide and too Thin

3. Perfect is the Enemy of Good

4. Jobs, Jobs, Jobs!

5. Why Engineers and MBAs Want to Become Peons and Sweepers

6. From *Son of India* to *Make in India*

7. India's Hotel California Problem

8. A Four-Letter Word Called Land

9. Black Money—We Won't Get It Back

10. The Fiscal Deficit Fudge

11. It's Not the Interest Rate, Stupid!

12. The Biggest Government

13. The Right to Work?

14. Conclusion: Of Gray Rhinos, and Not Black Swans

Acknowledgements

Endnotes

FOREWORD

I keep Vivek Kaul's trilogy on 'Easy Money' on my desk. It's all there: the fullest, most complete account of the rise of modern finance that I have seen anywhere.

Of course, money is inseparable – at least in the modern world – from government. The state creates and controls the money system, and uses it for its own purposes. So, it was perfectly foreseeable that Vivek's bold exploration of the financial world would lead him to the shores of politics. And it is not at all surprising that he should find there the same sort of illusions, larcenies and vainglorious ambitions that he discovered in the world of money.

Similarly, he goes about his surveying with an open mind and great energy. And similarly, he leaves the reader with a fuller, richer understanding of his subject. He tells us about government-made condoms, job programmes that kill employment and educational projects that reduce learning.

I can add nothing to it, especially since it concerns the Indian government, about which I know little. But while I can go no deeper, I can broaden the perspective.

'Government' needs to be understood in broader terms. It is not a fixed, well-defined thing, but a dangerous and volatile fluid that leaks into the economy and society and can poison them. First, the vapours make people giddy when thinking about the possibilities. With the government and its money behind them, they think they can do almost anything. Then, they go a little mad, undertaking projects that ought to be left alone and mismanaging those that should do well. And finally, they end up with a godawful mess and a terrible headache.

And it doesn't seem to matter what you call your government, or how many people you have involved in it.

If you lived in a small island community that functioned as a genuine democracy – where everyone voted on practically everything – it might be an illustration of Hillary Clinton's famous humbug, that the "government is all of us".

Normally, the number of people who actually govern is small. It is

never “all of us”. If it were, it would lose its meaning, since the ‘governed’ and the ‘governors’ would be the same people; the governors would be governing only themselves.

Instead, some people run ‘the government’. The rest are ‘governed’ by them. But, on our little enchanted island, since everyone participates in governing, you’d say that 100% of the population was governing. Thus, the yoke might be remarkably light; when people govern themselves, they tend to go easy. It would probably be essentially a consensual society in which people get along by going along, talking through differences and agreeing on compromises. The size of the governing class, therefore, may have little to do with the amount of governing going on.

The standard deceit of Leftist revolutionaries is inclusivity. They say they aim to make the governing class larger, with a government which is under the control of ‘the people’, or at least the ‘proletariat’, not the few, powerful, rich insiders. Even the founders of the American republic promised a government “of, by and for the people”.

Then, they discover that you can’t make an omelette without breaking some eggs. And when the eggs resist, you need to use more and more force to force your model society on the community. You start cracking the skulls of your opponents, and soon, idealism turns rapidly into totalitarianism.

Heavy, totalitarian control can be achieved with a small, visible government. Imagine another little island, across the straits. It might be like an efficiently run prison. There may be only one prison guard for every hundred people on the island. He might be assisted by other prisoners, who did his bidding, hoping to get an extra crust of bread in return. The ‘government’, you might say, is only 1% of the people. It is small. Its rules may be very few.

And yet, the guard would be backed by a whole brigade of enforcers – the police, the army, armed householders and the security industry – with the prisoners’ moves carefully regulated and tightly constrained. From these examples, we conclude that neither the form nor the size of government is directly or easily connected to the real amount or nature of governing. A dictator could be a hands-off, *laissez faire*, live-and-letlive kind of guy. A democratically elected assembly could attempt to govern every aspect of our lives.

For these reasons, I propose to widen the description of

government beyond the number of people employed in the public sector or the ostensible type of decision-making process. Instead, we should look at the extent to which the society and its economy are in thrall to politics as a truer measure of 'government'.

There are only two ways to get what you want in a community. Give and take; or just take. You either work, add value, negotiate and trade; or you pull out a pistol.

It's either markets; or it's politics. People are all, to some degree or other, as capable of 'politics' as they are capable of murder. Some are prone to it. And sometimes, a whole society gets taken over by it.

Government is the only institution that can pull out a pistol and get away with it. It asserts a monopoly on the use of force within its territory; anyone using force – or fraud – without its authorisation is an outlaw. Politics determines by whom, and how, that monopoly on force is used. The more politics in a society, the more wealth changes hands without the give and take that characterises a market system.

This helps to explain how governments that have been – on paper – relatively stable as a percentage of GDP or population have come to do so much governing. In short, in India, as elsewhere, the governors team up with local insiders and crony industries to extend the reach of politics.

Today, if you run a business in the medical field – insurance, ambulances, hospitals, drugs, private practice, medical devices and tests – you are in a partnership, of sorts, with the feds. They can tell you what you can do and what you can't. They approve your drugs. In many cases, they determine how much you can charge. They can put you out of business or make you rich.

The whole industry has been politicised. If you want to enter the field, the first thing you should probably do is hire a lawyer and a lobbyist, not a doctor.

When a business falls under the spell of politics, the interests of the customer or those of the owner are no longer paramount. Instead, satisfying the customer gives way to lobbying, bullying, pressuring, menacing, back-stabbing and seducing. The business turns inwards, with its primary mission to reward the insiders. But politics in business is self-limiting. In a free market, anything that takes your eyes off from providing better products and better services puts you at

a disadvantage to your competitors. But when the feds control the economy, politics runs wild.

Politics mean taking rather than making. As taking increases, making decreases. And as growth stalls, the relative pay-off from politics increases. We don't know which is the chicken and which is the egg. Does growth slow first, leaving politics – taking – the best way to get ahead? Or does politics slow growth? We don't know. Maybe both.

In the case of medical care, for example, the share of US GDP that went into the medical industry increased from less than 7% in 1970 to over 17% today. How did that happen? Politics. Since 1970, the number of doctors has barely doubled in the US. But the number of 'administrative employees' in the medical sector has gone up 3,000%.

The same is true in education. Teachers provide real value-for-money. Administrators play politics. Since 1970, in America, the number of teachers has risen by about 60%. The number of non-teaching administrators has gone up more than twice as much.

You can see the same trend in the military. This is interesting, because the military is a 'political' industry, in the sense that it is expected to use force. And yet, even the military can be diverted from its real mission… by politics.

An ideal fighting force is 'lean and mean'. Fighting men need to be young and vigorous. So, as they aged, the Pentagon used to say it was 'up or out'. Old soldiers were dead wood… unless they were destined for the top. And dead wood at the top was fatal. The old-timers slowed up decision-making. They got in the way. They always seemed to want to fight the last war.

There was one officer for every 10 enlisted men when the US won WWII. Now, there are twice as many officers… and four times as many generals. We haven't won a war since.

David Stockman saw it coming 30 years ago. As President Ronald Reagan's budget director, he saw how politics overwhelmed efforts to control federal spending. "The Triumph of Politics" he called it in his 1986 memoir.

Now, politics has triumphed almost everywhere.

INTRODUCTION

O
C
N
E
O
Y
M

There is nothing as practical as a good theory.

– KURT LEWIN[1]

This book was never meant to be written. In early 2016, I had committed to writing a book on real estate in India. While the idea had sounded very exciting, I somehow couldn't get myself to start writing the book.

I soon realised that there was nothing new I could write about Indian real estate over and above what I had already written in my regular columns. I had exhausted all angles in the more than fifty columns I must have written on Indian real estate over the last few years.

Furthermore, there is very little data available on Indian real estate. And whatever little data is available comes from real estate consultants, who essentially make their money from real estate companies. Given this, they have a tendency to keep saying 'All is Well' even when it's not. And I didn't want to write a book without access to proper and sufficient data.

Hence, I had more or less given up on the idea of writing the real estate book. One day, as I was daydreaming after a late afternoon lunch (of *rajma-chawal*, I think), the idea for the book you are holding in your hands came into my head.

Think of the headline first, an ex-editor of mine used to say. So, this book came into my head with the title and around five of the fourteen chapters it has. The first thing I did was to search for a notepad and frantically take down notes, so as to ensure that I didn't miss out on anything that my mind was throwing up at that point of time.

A few days later, I discussed the idea with a friend, whose first question was: "What is this *Big Government* that you want to talk about?" It was the most basic question that anyone could have asked if I had discussed the idea with him or her. Nevertheless, as silly as it may sound, I hadn't really sat down and thought about it.

And it wasn't laziness or anything, but basically the way I write

books. I think there are two ways of writing a book (a non-fiction one). One is to be an expert on the topic that you are writing on (i.e., to have a PhD in it) and then to sit down and write about it. The problem with many such books is that they are written for a very limited audience. It's like economists writing for other economists in a code language.

The other way is to have a reasonably good hold over the subject that you are writing on and then to dig deeper. That, I guess, is the journalistic approach to writing; but, on the whole, this makes books more readable. Of course, the thing here is that you figure out things as you go along. You first make yourself understand what something is all about and then you get around to writing about it. Given this, in this kind of writing, no assumptions are made. One tries and writes in the way one has made oneself understand things. Hence, these books can at times be lacking in depth, but they are usually pretty readable.

So, getting back to 'Big Government' and my friend. I had thought that I would get around to thinking about defining Big Government as I went along. And that's precisely what I did after the question from my friend gave me a wake-up call.

So, what exactly is Big Government? There is this very interesting American case (Jacobellis versus Ohio) where Justice Potter Stewart of the United States Supreme Court tried to describe his threshold test for obscenity. As he said on that occasion: "I shall not today attempt further to define the kinds of material I understand to be embraced within that shorthand description [hard-core pornography], and perhaps I could never succeed in intelligibly doing so. But *I know it when I see it* [emphasis added], and the motion picture involved in this case is not that."[2] Stewart was essentially judging whether a film titled *Les Amants* (The Lovers) was obscene or not. He said that the film wasn't pornography because he would know it when he saw it.

Big Government is a tad like that. While it is difficult to come up with a precise definition for it, one can immediately recognise it *when one comes across it*.

In fact, the friend who asked me to define Big Government further asked, during the course of our discussion, 'Is it the government employing too many people?' While this fits into the vague definition of Big Government as being something which one is able to immediately recognise when one comes across it, this isn't really true.

The Indian government is not a very large employer, neither at the central level nor at the level of the state governments. Though this might sound rather surprising, the data bears it out. As the Seventh Pay Commission Report points out: "Available literature indicates that the size of the non-postal civilian workforce for the US Federal Government in the year 2012 was 21.3 lakh. This includes civilians working in US defence establishments. The corresponding [number of] persons in position in India for the Central Government in 2014 was 17.96 lakh. The total number of federal/ Central Government personnel per lakh of population in India and the US works out to 139 and 668, respectively." This is discussed in detail in Chapter 1.

So what is Big Government then? It is essentially the government trying to do many things. More precisely, it is the government trying to do things that it shouldn't and in the process ignoring the things that it should be doing. As TN Ninan writes in *The Turn of the Tortoise —The Challenge and Promise of India's Future*:[3]

> There is too little of government attention paid to core areas like law and order, education and health—too few judges, too few teachers who teach, too few hospital beds; also too few trade negotiators and too few policemen, especially those with proper training. It should be obvious that there are many things that the state does inadequately or badly, and many tasks that the state has needlessly taken on itself.

Take the case of the government running Air India, which over the years continues to lose money. Between 2010-2011 and 2015-2016, the airline has lost close to Rs. 35,000 crore, and yet it continues to be run, bankrolled by the government. The losses are not surprising, given that the airline business is a very competitive business and the government clearly doesn't have the wherewithal to run it.

Of course, the government doesn't have an endless supply of money. No government does. And the money that goes towards ensuring that Air India keeps running is taken away from other things, like education, healthcare and agriculture.

And Air India is not the only such dinosaur that the government continues to patronise. One of the companies that the government continues to own is Hindustan Photo Films. Of course, the company doesn't make photo films anymore, but in 2014-2015, it had losses of Rs. 2,164 crore. The question is: Why would a government in this day and age continue to own a photo film company? This is discussed in detail in Chapter 2.

Hence, over the years, the government has tried to do many things on its own without having the wherewithal to do so. As Kaushik Basu, a former Chief Economist of the World Bank and a former Chief Economic Adviser to the Ministry of Finance in India, writes in *An Economist in the Real World—The Art of Policymaking in India*:[4]

> One mistake early Indian policymakers made was to try to micromanage the economy. While it is true that the government needs to attend to a range of policies, from shipping to the quality of education in villages, to managing the nation's international economic relations, it is imperative to realise that it is not feasible for the government to attend to all the varied and layered needs of society with equal diligence.

As Basu further adds: "An intelligent government recognises that *no matter what kind of society it aims to build* [emphasis original], it is hopeless to try to deliver it all by itself."[5]

The best example for this is the huge number of Central Public Sector Enterprises (CPSEs) that were set up between the 1950s and the 1970s to make almost everything, from steel to bread. In 1951, India had just five CPSEs. So, this is not something we inherited from the British when they left India in 1947. Over the years, many of these firms have ended up being terribly inefficient. Those which continue to do well are largely in areas in which the government has a monopoly. This is discussed in detail in Chapters 1 and 2.

This *inefficiency* has hurt the Indian economy over the years, and it continues to do so. The accumulated losses of the CPSEs stand at more than Rs. 1 lakh crore. The accumulated losses of the state electricity boards stand at close to Rs. 4 lakh crore.

Other than the CPSEs, the government continues to own 27 Public Sector Banks (PSBs). This has cost the government a lot of money over the years. Between 2009-2010 and the time of writing the introduction to this book (November 2016), the government had invested close to Rs. 1,25,000 crore in these banks to recapitalise them. The banks are thus huge money guzzlers. Estimates suggest that the recapitalisation of these banks would need close to Rs. 10 lakh crore by 2019, when the new Basel III norms come into effect. Where is the government going to get this money from? This is discussed in detail in Chapter 11. This chapter is slightly more technical than the other chapters in the book, and so, dear reader, if you find it a tad too technical for your taste, you can give it a skip. It won't make much of a difference to the overall message of the book. At the same time, I suggest that you do give a shot at reading it.

Of course, all this money could have gone towards other things. And more than the money, it diverts attention from other, more important issues that need to be handled. As Vijay Joshi writes in *India's Long Road—The Search for Prosperity*: "The Indian state is too much of a jack of all trades…. Unfortunately, the Indian state has shown itself unequal to the challenge of discharging core tasks. This is partly because it has taken on too much that is outside its proper domain."[6] Over the years, very little attention has been paid to important areas like education, healthcare, law and order, trade policy, physical infrastructure, the railways, and so on.

Another excellent example of the government trying to do everything are the Industrial Training Institutes, or the ITIs in short. Until a few years ago, the government had dominated the low-end training space through the 8,500 ITIs spread all across the country. The price of attending these courses was very low. But they really did not solve India's low-skills problem in any way.

Many ITIs do not offer courses on acquiring skills like plumbing, which are very much in demand. Over and above this, they insist on educational qualifications which are really not required. Take the case of the states of Uttar Pradesh and Maharashtra, two of the larger states. If you want to get into a carpentry course in an ITI in these states, you need to have passed Class VIII, with science having been one of your subjects.[7] Why is this even a requirement? Whatever science is required in these cases is bare-bones enough to be taught at the beginning of the carpentry course itself.

Thankfully, the realisation has sunk in that the government cannot skill everyone who is looking for a job. In recent years, the National Skill Development Corporation has started partnering with private enterprises to offer training courses. This is indeed a good development, which is discussed in detail in Chapter 5.

What else is Big Government? It is the government trying to come up with ambitious solutions without taking into account its own implementation capabilities or even that of the system as a whole. Or, to put it simplistically, that perfect is the enemy of good is not something that Indian governments understand.

Take the case of the Right to Education, which became a legal right from April 1, 2010 onwards. The idea behind this is to offer free

and compulsory education to children between the ages of six and 14. A very noble thought indeed! But this comes with other requirements, like schools having adequate physical infrastructure like, say, a playground. Over and above this, the Right to Education Act makes it compulsory for teachers to complete the syllabus without really addressing the required learning outcomes.

The result is that the learning outcomes of students have been falling drastically over the years. An estimate suggests that, over the period of ten years up to 2015, 10 crore children completed primary school without the ability to do some basic reading or even mathematics.[8] This is discussed in detail in Chapter 3. A similar sort of mess can be seen in the ambitiously launched Mahatma Gandhi National Rural Employment Guarantee Scheme. This is discussed in detail in Chapter 13.

If that is the state of Indian education, how does a programme like *Make in India* take off? Even jobs like those of a plumber, mason or carpenter demand some ability to read and to do some basic maths. Jobs in manufacturing also require some basic educational skillsets, as do jobs in various services.

Given this, the Right to Education looks towards a perfect outcome and, in the process, has ended up spoiling what used to be a good enough or decent outcome. In fact, many private schools with low fees, which cannot afford to have the physical infrastructure that the Right to Education Act calls for, have been shutting down. And this is not a good sign.

The solution is to focus on learning, and that is something which has traditionally been missing from the education policy of the government. The implementation of the Right to Education has only made it worse.

Another great example of perfect being the enemy of good are India's labour laws. Estimates suggest that India has around 200 labour laws (if one takes into account those passed by the central government as well as the state governments). The idea behind each and every labour law is to protect the labour force employed by businesses. It is to ensure that they don't get a raw deal, and the inherent fairness that should be a part of any democratic system is thus expected to be maintained. Noble intentions indeed!

But the negative consequences of this are now huge. The labour

laws have become so complicated that an average Indian firm starts off small and continues to remain small. An average Indian firm employs around 2.2 individuals.[9] Also, many of these enterprises are run by *reluctant entrepreneurs* (a term coined by the economists Abhijit Banerjee and Esther Duflo). These people would happily take on a regular job if it were available. They become entrepreneurs because they do not have a choice. This is discussed in detail in Chapters 4 and 7.

Jobs are created in a country when small firms grow bigger. In India, this is clearly not the case. Small firms continue to remain small. Given this, what happens to the close to one million (10 lakh) Indians who are entering the workforce every month? Where are the jobs for these individuals? And if there are not enough jobs for them, what happens to our so-called demographic dividend, which is something that we have been hearing about for the last ten years? This is discussed in detail in Chapter 4.

These are not easy questions to answer. But things can be turned around if Big Government in these areas is overturned.

And what else constitutes Big Government? It is the government meddling in markets with the intention of helping the poor and downtrodden, but ending up with unintended consequences which it had of course not bargained for. The Indian state is an *intrusive* one, and that ends up hurting the overall economy.

Take the case of the rice and wheat that is distributed to the poor through the Public Distribution System (PDS) to meet the requirements of the Right to Food Security Act. This rice and wheat is procured from farmers. The government procures these foodgrains through the Food Corporation of India (FCI) and other state procurement agencies.

The government buys as much rice and wheat as the farmers bring to it. This has led to a situation wherein there is a huge overstocking of rice and wheat with the government. Until a few years ago, this pushed up the prices of rice and wheat in the open market. At the same time, tonnes of rice and wheat were rotting in the godowns of the FCI. Furthermore, the assured procurement of rice and wheat has led to a situation where farmers are not growing enough pulses or oilseeds.

Hence, the prices of some pulses have even crossed Rs. 200 per kg

in the recent past. This is the unintended consequence that the government hadn't bargained for. It doesn't help that, over the years, with increasing income levels, dietary patterns have changed and people are eating more protein-based food. Pulses are an excellent source of protein. Hence, their demand has gone up, but their supply hasn't kept pace, despite the government importing a huge quantity every year.

What is the solution? The government has started buying pulses as well, just like it buys rice and wheat. The hope is that assured procurement will now encourage farmers to grow pulses as well, just like it had encouraged them to grow rice and wheat in the past. And once the farmers start growing more pulses, the prices will stabilise. The question is: What will be the unintended consequence of this? That time alone will tell, but there definitely will be one! This is discussed in detail in Chapter 12.

What else is Big Government? It is the government offering the same product at different prices in order to make the lives of those at the *bottom of the pyramid* better and, in the process, violating the basic economic principle of *one product-one price*.

Take the case of rice, wheat, kerosene and sugar, which are distributed through the PDS at a subsidised price (which is very low in comparison to the market price of these products). A huge chunk of this is siphoned off and sold in the black market. Hence, it does not reach those it is intended for. In the process, the government also ends up spending much more money than it would have if there were no leakages. The same stands true for urea as well, which is sold at a 75 per cent subsidised price. A huge chunk is smuggled into neighbouring countries and, at the same time, is also sold in the black market for other industrial uses. In Punjab and Haryana, it is used to whiten milk.

The way to get around this is to use information technology and banking infrastructure in order to make cash transfers, which allows people to buy things at their normal market prices. The infrastructure which would allow the government to deliver on this is still being built. Hopefully, after a few experiments, the government should be in a position to have it implemented throughout the length and breadth of the country. This is discussed in detail in Chapter 12.

For something like this to happen, Big Government needs to

distinguish between delivering a product and producing it.[10] This is best explained by a conversation I had with a senior editor of a digital publication. This gentleman justified the government owning a company called HLL Lifecare, which produces condoms, among other things, on the pretext that the government needs to distribute *Nirodh* condoms to the citizens of this country.

While the government can choose to distribute condoms through its healthcare centres throughout the country, there is no reason that it should be producing them as well.[11] It can simply buy them over the counter from private companies, which anyway do a much better job of producing condoms than the government ever can.

Along similar lines, if the government wants to distribute rice and wheat, among other things, there is no reason why it should go around acquiring this rice and wheat and then selling it at a very cheap price through the PDS. It would be far simpler for the government to hand over an adequate amount of cash to its citizens, who can then buy rice and wheat from the open market at the market price. This would ensure that the rice and wheat would reach those it is intended for, which is definitely not the case the way things are currently.

And what else is Big Government? It is the government having too many regulations in areas where it has hopes of redistribution by taking money from the rich and paying it to the poor. Take the case of the income tax scenario in India. In 1970-1971, the highest marginal rate of tax was 97.75 per cent. The idea, of course, was to tax people who earned beyond a certain amount and to use that money to do good things for the poor.

What it did instead was lead to a situation wherein people who were supposed to pay income tax simply did not. The black economy, where people carried out transactions in cash, thrived. The highest marginal rate of income tax has come down to 30 per cent since then. Nevertheless, the black economy continues to thrive, given that the income tax system continues to remain complicated and that the reputation of the Income Tax Department is not the best one going around.

The thriving black economy essentially leads to the government not earning as much revenue as it should. The black money that is generated finds its way into real estate and gold. In fact, real estate is

the number one conduit for black money in the country. It has led to a situation where real estate prices have gone through the roof all across the country, making homes unaffordable. This is discussed in detail in Chapter 9.

In a country like India, this leads to the misallocation of capital. It also puts a question mark on missions like 'Housing for All by 2022'. Furthermore, real estate and construction can be a huge job generator, given that they can generate low-skill jobs, which is where India's comparative advantage lies. But, for that to happen, the housing sector needs to be revived. For the housing sector to be revived, it is essential that the amount of black money going into it comes down.

The real estate sector has forward and backward linkages with 250 ancillary industries.[12] This basically means that when the real estate sector does well, many other sectors, right from steel and cement to furnishings, paints, etc., do well. The multiplier effect is huge.

The real estate sector has now been in the doldrums for more than five years. The simple reason for this lies in the fact that most Indian real estate is unaffordable. For this anomaly to be corrected, the nexus between politicians and builders needs to end. The system of electoral financing needs to evolve and move away from the way it currently is. And this is easier said than done.

In fact, many of these areas of Big Government lead to the government not earning as much revenue as it could. This leads to a situation wherein the government has to fudge data in order to meet its fiscal deficit target every year. The fiscal deficit is the difference between what a government earns and what it spends during the course of a particular year. This is discussed in detail in Chapter 10.

One area where Big Government has made a huge mess is in the area of land acquisition. In this area, the government, working through the district collector, had almost unparalleled powers under the Land Acquisition Act of 1894 (which lasted until 2013).

In fact, the government could acquire land almost overnight, from anyone and at a very low price, and then declare it to be for a public purpose. In 1984, the Act was amended, and the government was allowed to acquire land for even companies. After this, land was acquired under the guise of public purpose for ashrams, swimming pools, golf courses, colonies, and even compressor factories.

There were many cases wherein governments acquired land cheaply from farmers and then sold it to private companies at much higher prices. Of course, this couldn't have gone on *ad infinitum*, and protests soon broke out across large parts of the country. Protests in parts of West Bengal at Singur and Nandigram turned extremely violent.

All this finally led to the passage of a new Land Acquisition Act in 2013. This Act, given that it plugs the loopholes of the 1894 Act, has brought the entire land acquisition process to a standstill.

Companies like to acquire land through the government for many reasons. A big reason lies in the fact that land titles in India are not clear. This is again an impact of Big Government. While the government was concentrating on things it shouldn't have been doing, it did not concentrate on things that it should have been doing.

The Rajasthan government has recently made some progress in coming up with a foolproof system on the land title front. Hopefully, other states will follow suit soon.

Then there is the issue of Change in Land Usage (CLU). Agricultural land beyond a certain size cannot be owned, as per the land ceiling regulations. This limit varies from state to state. What this does is that it limits the way a company can go about buying land that it needs for a particular project. A corporation wanting to set up a project cannot buy land beyond a certain size. Furthermore, it is not possible to buy the land and then appeal to the state government for a change in land usage. In order to get a change in land usage clearance (say, from agricultural to industrial), a company needs to acquire land beforehand, and this is not possible given that agricultural land beyond a certain size cannot be owned.[13] So, this is a bit of a chicken-and-an-egg situation, something which is an outcome of Big Government again. This is discussed in detail in Chapter 8.

On the flip side, the farmer who owns the land and wants to sell it and is looking for a buyer is also not granted a change in land usage clearance.[14] Hence, private companies looking for land for reasonably big projects end up approaching the state government. Actually, the entire system the way it is structured is rigged in favour of politicians who are in positions to be able to grant CLU permissions.

All these areas of Big Government, along with other major deficiencies, like that of physical infrastructure, essentially put a

programme like *Make in India*, launched with great fanfare by the Narendra Modiled government in September 2014, at risk. It puts at risk the ability of the nation to create jobs for the one million individuals entering the workforce every month. This is discussed in detail in Chapter 6.

If India has to progress and pull up its multitudes from poverty, all these areas need to be reformed. The levels of Big Government in these areas need to come down. The trouble with most reforms in India has been that they have never been explained to people. It has always been the case of reform by stealth. And given this, politicians do not find reforms feasible, i.e., that reforms don't turn into votes is their general belief. Also, India's economic reforms have at best been very patchy. But, in the days to come, this is not going to be enough.

The trouble is that there is almost no track record of any country (except China) growing at a rapid rate of 7 per cent per year for a very long period of time, which is what India needs to achieve if it has to be prosperous and pull its millions out of poverty.

When it comes to superfast growth, China grew by 8.1 per cent per year between 1977 and 2010. Only two other countries came anywhere near. As Lant Pritchett and Lawrence H Summers write in a research paper titled 'Asiaphoria Meets Regression to the Mean':[15]

> There are essentially only two countries with episodes even close to China's current duration. Taiwan had a growth episode from 1962 to 1994 of 6.8 per cent (decelerating to growth of 3.5 per cent from 1994 to 2010). Korea had an episode from 1962 to 1982, followed by another acceleration in 1982 until 1991, when growth decelerated to 4.48 per cent—a total of 29 years of super-rapid growth (> 6 per cent)—followed by still rapid (> 4 per cent) growth. So, China's experience from 1977 to 2010 already holds the distinction of being the only instance, quite possibly in the history of mankind, but certainly in the data, with a sustained episode of super-rapid (> 6 per cent per annum) growth for more than 32 years.

Hence, the odds are stacked against India. And it will mean the government doing many things right in the years to come if the country has to get anywhere near a sustained growth rate of 7 per cent or more for a longish period of time. Big Government simply needs to end in many areas. At the same time, the government has to get its act together in other areas, like education, physical infrastructure, agriculture, healthcare, etc., which it has ignored over the years.

The sad fact is that countries don't reform unless they face a crisis.

The question is: Can India really afford to wait for something like that?

In July 2016, I got talking to an economist close to the current Narendra Modi government. My question to him was very simple: Does the current government realise what it is staring at?

It took him a while to realise what I was asking. My point was fairly straightforward. There are various estimates which suggest that nearly a million (10 lakh) individuals are entering the Indian workforce every month. And this is likely to continue over the next two decades.

Over and above this, there is huge disguised unemployment in agriculture, where nearly 50 per cent of the country's workforce produces only around 18 per cent of its Gross Domestic Product (GDP). Hence, it is clear that people need to be moved from agriculture into more productive enterprises. The only way this can be handled is by creating more and more low-skilled jobs, because that is where India's competitive advantage lies.

Over the years, it has become more or less clear that the government cannot offer jobs beyond a point. It simply doesn't have enough money going around to do that. And, more than that, it remains a very inefficient way of employing people. Government employment of various forms (state governments, union government, central public sector enterprises, etc.) has either stagnated or come down.

So, the only solution is to create an environment wherein entrepreneurship flourishes and India's small and medium enterprises grow bigger and, in the process, create more jobs. For that to happen, the government needs to carry out reforms in its labour laws, education, ease of doing business and land acquisition.

India's convoluted labour laws have not allowed many a firm to grow bigger than it currently is. There is enough evidence going around to show this. India's education standards have fallen after the Right to Education Act came into force in April 2010. As mentioned earlier, the learning outcomes have come down dramatically. The ability of children to read basic text and do basic maths has come down. This is something that needs to be addressed urgently.

Almost no manufacturing entrepreneurship is possible without

land. The land acquisition process continues to remain in a mess. If India has to create jobs, these basic things need to be set right. And in order to set these basic things right, India needs big-bang economic reforms. This isn't exactly rocket science! To be fair, the Modi government tried to address the land acquisition issue in mid-2015, but, given the resistance of the other parties, it failed.

While the Modi government has done a lot of good things on several fronts, from banking to power and physical infrastructure, it has largely stayed away from any economic reforms which would get it into a confrontation with the existing order.

Any labour law reforms would involve a run in with the trade unions. Any education reforms would involve a run in with the teachers' unions all over the country and state governments as well. Any ease of doing business reforms would involve a run in with the lower level bureaucracy, which is responsible for delivering much of what any government has to offer.

This was my basic point put to the economist close to the Modi government when we got talking. He responded nonchalantly by saying: 'The so-called big-bang reforms only happen when a country is facing an economic crisis.' He further told me that there was enough research in economics going around to back his claim. He offered this as a *justification* for the Modi government not attempting any big-bang economic reforms.

And what he was saying is true. As Ruchir Sharma writes in *The Rise and Fall of Nations—Ten Rules of Change in the Post-Crisis World*: "Nations are most likely to change for the better when they are struggling to recover from a crisis. When the country's back is against the wall, the general public and the political elites are most likely to accept economic reform."[16]

An excellent example of this is the first wave of economic reforms that India initiated in 1991, when it was on the brink of an economic crisis, or probably was even facing one. The first wave of economic reforms happened only because India was facing an economic crisis and not because the political leaders of the day suddenly had a change of heart after all the years of batting for socialism.

As Michelle Wucker writes in *The Gray Rhino—How to Recognize and Act on the Obvious Dangers We Ignore*: "Human nature as well as organisational and social systems are set up to reinforce the *status quo*

and a rose-colored view of what is to come…. Denial is a deep-seated element in the lead-up to… many crises."[17]

If we look at things from this perspective, then there clearly is a reason for the Modi government in not pursuing big-bang economic reforms. But can this *reason* become a *justification* for the Modi government not pursuing economic reforms? Not really.

India needs jobs, and it needs way too many of them. The fact of the matter is that not enough jobs are being created. And those that are being created are in the informal sector, which has its own set of problems. As the Economic Survey of 2015-2016 points out: "The informal sector should… be credited with creating jobs and keeping unemployment low. Yet, by most measures, informal sector jobs are much worse than formal sector ones—wages are, on average, more than 20 times higher in the formal sector."

Formal jobs also allow workers to build an employment history, which, among other things, allows them access to cheaper credit. Hence, what India needs are formal sector jobs. As the Economic Survey points out: "Thus the challenge of creating 'good jobs' in India could be seen as the challenge of creating more formal sector jobs."

Make in India envisages the creation of 10 crore additional jobs in manufacturing by 2022. In order to get anywhere near this number, the Modi government needs to initiate reforms which bring down the Big Government that India faces at this point of time. And time is clearly running out on that front.

As Sharma writes: "The political honeymoon phase—the early years of an administration—is the period when an emerging-world leader is most likely to push through reform with a positive impact on the economy."[18] Half of the Modi government's term of five years is more or less over, and the cycle for the next Lok Sabha elections in 2019 is well and truly underway.

In this scenario, can we expect any meaningful reforms from the Modi government during the remaining half of its term? This is something worth thinking about.

Mumbai
November 27, 2016

Vivek Kaul

Postscript: One question that I was asked by a friend who read the book as it was being written was: Who is this book for? 'Is it an account of the current Indian economy? Is it a guide to the economists and the government about what is going wrong and what can be done? Is it for laymen and students to know the current and historical facts?' my friend had asked during the course of reading and reviewing the book.

While as a writer I want anyone and everyone to read the book, it is important that I make one thing clear here. This book is not a guide for economists, the government and the economists in the government on what is going wrong and what can be done. In fact, the government has access to a lot of reports and analyses which can answer a major number of questions with regard to the Indian economy.

When the PV Narasimha Rao government carried out its big-bang economic reforms in July 1991, it did not take months to prepare for it. It already had access to most of the ideas that were implemented during the course of opening up the Indian economy. As Rao would later put it: "The political leadership had access to these ideas. The challenge was not in making announcements and implementing their recommendations. It was in creating the political climate in which they could get implemented."[19]

The point being that the government already has access to many of the problems, ideas and potential solutions discussed in this book. The challenge it has, as always, is in implementing them.

Also, given the times that we live in, another point needs to be made clear here. Any criticism that I make of the current Narendra Modi government in the book shouldn't be seen as a commendation of the previous Congress governments which have governed the country since Independence. Most of the criticism of Modi is because he has more or less backtracked on the *minimum government* that he promised the nation during the run-up to the Lok Sabha elections of 2014.

Furthermore, the mess that currently prevails is because of all the Congress governments that governed the country since Independence, and it will take a lot of time, effort and energy to untangle it. After all, Big Government is not going to go away overnight.

Finally, the book has been written over a period of 9 months, hence, the period of analysis might differ by a few months across

sections. I have tried to update the data as much as I could depending on its availability and taking the publication deadline into account as well.

1. THOSE WERE THE DAYS, MY FRIEND!

> Nations stumble upon establishments, which are indeed the result of human action but not the result of human design.
>
> – ADAM FERGUSSON

In early 2016, a wonderful book called *When Breath Becomes Air*, written by Paul Kalanithi, was published. Kalanithi was an Indian American doctor who, one fine day, realised he had lung cancer and wrote a book documenting his life and how he went about fighting the disease. In the end, he could not complete the book. His wife wrote the last chapter.

During a particular stage of his disease, when Kalanithi was going through a really tough time, a pantheon of specialists (gastroenterologists, endocrinologists, infectious disease specialists, oncologists, neurosurgeons, etc.) got involved in treating him.

And this created a major problem. As Kalanithi writes:[20]

> During lucid moments, I was acutely aware that with this [*sic*] many voices, cacophony results. In medicine, this is known as the WICOS problem: Who Is the Captain of the Ship? The nephrologists disagreed with the ICU doctors, who disagreed with the oncologists, who disagreed with the gastroenterologists.

WICOS is not a problem which is limited to medicine. It plagues many institutions, including governments, with different people trying to lead the institution in different directions. In September 2013, when the Bhartiya Janata Party (BJP) chose Narendra Modi to lead it in the 2014 Lok Sabha elections, one thing that became immediately clear was that, if Modi won, the government he would form would not have a WICOS problem.

He would be the true leader of the government, unlike the Manmohan Singh government, which was basically run from the backseat by the Congress Party President Sonia Gandhi and her team of advisers.

This belief came from the way Modi had administered the state of Gujarat for more than a decade, with three terms as Chief Minister. The state was run largely out of the chief minister's office by bureaucrats, with Modi himself holding most of the important

ministerial portfolios.

During the course of campaigning for the 2014 Lok Sabha elections, Modi had also said: “I believe that government has no business to do business. The focus should be on Minimum Government but Maximum Governance.”[21]

Given that there was no WICOS problem associated with Modi, people believed what he said. They thought that, finally, they would, for the first time, see the Indian government get out of business and concentrate on areas that it should.

But, nearly two and a half years later, that hasn’t turned out to be the case, even though Prime Minister Modi is now talking about the turnaround success of the public sector enterprises.

The government continues to run Mahanagar Telephone Nigam Ltd. (MTNL), a telephone company. The company had incurred losses of close to Rs. 5,000 crore between April 1, 2014 and March 2016.

The government continues to run Air India. The airline has incurred losses of thousands of crores over the years. In 2014-2015 alone, the airline lost close to Rs. 6,000 crore. In 2015-2016, the losses came down to Rs. 2,636 crore, primarily on account of the aviation turbine fuel prices crashing.

The government even runs a hotel chain called ITDC. It runs a company which manufactures scooters (Hindustan Scooters Ltd.). And close to where I live in central Mumbai, there is the Bicycle Corporation of India. Oh, and if all that isn’t enough, the Indian government even makes condoms (through HLL Lifecare, formerly Hindustan Latex Ltd.).

In fact, the losses of these companies are borne by the government, which ultimately means the taxpayer. The Economic Survey of 2015-2016 estimates that the accumulated losses of the public sector enterprises until 2013-2014 had stood at Rs. 1.04 lakh crore. As per the Public Sector Enterprises Survey for 2014-2015, the total losses of the loss-incurring public sector enterprises for the financial year ending on March 31, 2015 amounted to Rs. 27,360 crore.

In fact, the losses of the top ten loss-incurring CPSEs amounted to Rs. 23,380 crore (see Table 1.1). The losses of these enterprises made up for more than 85 per cent of the total losses, as can be seen from

the same table. The likes of Bharat Sanchar Nigam Ltd. (BSNL), Air India and MTNL make for a major part of the losses.

The total number of loss-incurring firms in 2014-2015 was 77, up from 70 in 2013-2014. The number of profit-making firms decreased from 164 to 157. This basically means that one-third of public sector enterprises are loss incurring.

Hence, the overall accumulated losses of the public sector enterprises stand at more than Rs. 1,31,000 crore if we add the figure put out by the Economic Survey of 2014-2015 with that available in the Public Sector Enterprises Survey for 2014-2015. It is worthwhile noting here that the losses during 2014-2015 were around 26 per cent of the total accumulated losses before that.

Table 1.1: The top ten loss-incurring CPSEs during 2014-2015.

Sr. No.	Name of Company	Losses (in Rs. crore)	% age of Total Losses
1	Bharat Sanchar Nigam Ltd.	8,234	35.2
2	Air India Ltd.	5,860	25.1
3	Mahanagar Telephone Nigam Ltd.	2,893	12.4
4	Hindustan Photo Films & Manufacturing Company Ltd.	2,164	9.3
5	Mangalore Refinery & Petrochemicals Ltd.	1,712	7.3
6	Hindustan Cables Ltd.	933	4.0
7	STCL Ltd.	413	1.8
8	Fertilizers & Chemicals (Travancore) Ltd.	400	1.7
9	Air India Engineering Services Ltd.	390	1.7
10	Hindustan Fertilizers Corporation Ltd.	381	1.6
	Total Losses	**23,380**	**85.5**
	Total Losses of all Public Sector Enterprises	**27,360**	**100**

Source: Public Sector Enterprises Survey, 2014-2015.

The interesting bit here is that not all of the losses are accounted for in the annual budget of the central government. As the economist Jaimini Bhagwati puts it: “Funds will be provided to support continued losses in public sector undertakings… some of which are

not part of the Budget."[22]

Hence, the government spends thousands of crores of rupees every year to keep running the loss-incurring companies, presumably in order to sustain the livelihood of around 2.5 lakh people, who work in these loss making companies.

Why is the government mollycoddling 0.02 per cent of the nation's population when the money going towards sustaining the losses of these companies could easily go somewhere else?

This is basically a crime in a country as poor as India. As Bill Bonner writes in *Hormegeddon—How Too Much of a Good Thing Leads to Disaster*: "As a society grows richer it can afford more illusions, more entertainments, more re-distribution of wealth, more regulation, higher taxes, and more unproductive people."[23] Which, right now, India clearly can't.

****

It is important to explain here that Big Government does not really mean that the central government based out of New Delhi, which governs India, employs a large number of people. While the general feeling is that the central government employs a lot of people, this is incorrect.

In the Indian context, government employees across all hierarchies tend to be referred to as *babus*. So who is a *babu*? More than coming up with an exact definition, it is easier to just visualise him, in a cynical sort of way. He is the quintessential government employee, who does not reach office before 11 am. After he reaches office, he sits in his chair and does not do any work, but takes regular breaks to have cups of tea under the banyan tree outside his office, with a constant eye on his watch so that he can leave office the moment it strikes 5 pm (or maybe even 4 pm in some cases). Oh, and of course, to do any work the *babu* needs to be paid a bribe. (How could I have missed out on that?)

The Bangla singer Nachiketa has a fantastic song defining a *babu*; it's called *Aami Sorkari Karmochari* (I am a government employee). Those who do not understand Bangla can listen to the Hindi version of the song by the same singer. It's called *Main Mulazim Hoon Sarkari*. I guess a better song has not been written stereotyping the government in India since when this song came out, sometime in the 1990s.

Now, to get back to the topic at hand. So we have some sort of a definition in place of who a *babu* is. It is not perfect, but I hope you get the drift, dear reader.

And how many *babus* does the central government employ? The Seventh Pay Commission Report, which was released in November 2015, had some data which will surprise you on this front. As on January 1, 2014, the central government employed a total of 33.02 lakh individuals, against a sanctioned strength of 40.49 lakh.

Of the 33.02 lakh employees, 9.8 lakh were employed by the Ministry of Home Affairs. These primarily include individuals working for the central paramilitary forces like the Central Reserve Police Force (CRPF), the Border Security Force (BSF), etc. The Railways employed another 13.16 lakh. The Defence Forces employed 3.98 lakh in civilian positions. And the Postal Department employed 1.98 lakh.

There is some controversy here though. The data obtained by the Seventh Pay Commission puts the number of employees working for India Post at 1.98 lakh. But the Expenditure Budget for 2014 puts the number at 4.6 lakh. And data from the Directorate General of Employment and Training (DGET) suggests that the number of postal employees was at 2.09 lakh.

In fact, the same variation is seen when it comes to the number of people employed in defence in civilian positions. The Expenditure Budget for 2014 suggests 34,813; the DGET, 3.75 lakh; and the data obtained by the Seventh Pay Commission puts it at 3.98 lakh. For the sake of this analysis, we will stick to the figures that the Seventh Pay Commission has mentioned.

If we were to leave out those employed by the Railways, India Post, the Ministry of Home Affairs and those working in defence in civilian positions, the central government employs a little over 4 lakh people, and that is clearly not huge in a country of more than 120 crore people.

Also, people working for the central paramilitary forces and even defence in civilian positions clearly cannot be considered to be *babus* in the strictest sense of the term.

The India Post employees could possibly be considered as *babus*. If

we add their numbers, then we get 6.08 lakh central government employees who can be labelled as *babus*. While the Railways employees are not exactly known for their efficient manner of working, yet the railways is an essential service and people are needed to run it.

As the Seventh Pay Commission report points out: "In fact, the number of personnel working in the Secretariat of ministries/ departments, after excluding independent/statutory entities, and attached and subordinate offices, will add up to less than thirty thousand. The 'core' of the government, so to say, is actually very small for the Government of India, taken as a whole."

While it is not easy to compare one government with another, the Seventh Pay Commission does make an attempt to do just that. As the report points out:

> Available literature indicates that the size of the non-postal civilian workforce for the US Federal Government in the year 2012 was 21.3 lakh. This includes civilians working in US defence establishments. The corresponding [number of] persons in position in India for the Central Government in 2014 was 17.96 lakh. The total number of federal/ Central Government personnel per lakh of population in India and the US works out to 139 and 668, respectively.

What this clearly tells us is that the Indian government is not big at the central government level, at least. There is a "concentration of personnel in a handful of departments", like the Home Ministry and the Railways Ministry. The Department of Revenue is other big employer, the Pay Commission report points out.

Also, we need to take into account the number of individuals working for the CPSEs as well. As per the Public Sector Enterprises Survey of 2014-2015, the number of employees working for the public sector enterprises as of March 31, 2015 stood at 12.91 lakh. Interestingly, the number had come down from 16.14 lakh during 2006-2007, a fall of 20 per cent.

The state governments, on the whole, employ another 72.2 lakh individuals.[24]

Hence, the Indian government is not big when it comes to the number of people it employs. It is big in the number of things it tries to do, and hence, in the process, it messes up other important things. This is a theme we shall explore throughout this book.

****

The question is: How did it all start? How did the government of India come around to the idea that it has to get involved with virtually everything? How did the government become what we now refer to as the *mai-baap* sarkar?

The conventional answer to this is that India's first Prime Minister, Jawaharlal Nehru, was enamoured by socialism, and this led to the Indian government trying to ensure that it was present in all kinds of businesses.

Conventional answers are not always wrong. But there is a little bit more to this answer than just Nehru and his socialism. In 1944, India's leading businessmen, the likes of JRD Tata, GD Birla, John Mathai, Purshotam Das Thakurdas, Kasturbhai Lalabhai and AD Shroff, met in Bombay (now Mumbai).

The meeting ended up in what came to be known as the Bombay Plan. As Gurcharan Das writes in *India Unbound—From Independence to the Global Information Age*: "The Bombay Plan argued for rapid and self-reliant industrialisation. Although the industrialists recognised the need for foreign capital and technology, they wanted it to be under strict control of the state."[25]

This wasn't surprising, given that India had first been under the rule of the British East India Company and then the British Crown. Given this, the industrialists' distrust of foreign capital was but natural. Also, these industrialists wanted foreign ownership to be prohibited in important areas, like banking, insurance, aviation and power. In case foreign companies were already present in a particular sector, they wanted them to be nationalised.[26]

After Independence, India saw various sectors becoming nationalised. In 1953, private airlines were nationalised. In 1956, insurance companies were nationalised. And in 1969 and 1980, banks were nationalised.

The industrialists who came up with the Bombay Plan were essentially willing to cede to state control in many areas of business. As Das writes: "Even more disastrous was their acceptance of a vast area of state control—in fixing prices, limiting dividends, controlling foreign trade and foreign exchange, in licensing production, and in allocating capital goods and distributing consumer goods. Without realising it, the Indian capitalists had dug their [own] graves."

What would have happened if the industrialists hadn't come up with the Bombay Plan? Would the government of India, especially when it came to business, have been as all-encompassing as it eventually turned out to be? Alas, we will never have an answer to this question. Nevertheless, this will continue to remain an interesting counterfactual which scholars may work on in the days to come.

But what we do know is that, rather ironically, Indian industrialists were the first ones to offer the option of Big Government to the Indian government. And then along came Prasanta Chandra Mahalanobis.

****

Mahalanobis was the Honorary Statistical Adviser to the government of India. Despite this rather nondescript title, he had an extraordinary influence on Nehru.

Mahalanobis came up with the scientific input-output model of the Indian economy. What was this model all about? As Sanjeev Sanyal writes in *The Indian Renaissance—India's Rise After a Thousand Years of Decline*: "It was a static mathematical model in which the economy took [in] the raw materials and spat out finished goods. All that needed to be done was to collect statistics and then coordinate the supply of inputs through a system of government control and licensing."[27]

This put the public sector, or the government-owned companies, at the heart of the economic system that evolved. As Sanyal writes: "The private sector was tolerated but strictly held in check by industrial licence, while the public sector became the centrepiece of national policy." Over and above this, a Planning Commission was also set in place. The main job of the Commission was to come up with Five-Year Plans for the country.[28]

This is not to suggest for even a moment that Mahalanobis was doing what he felt like. At the end of the day, he was carrying out what Nehru wanted him to do. This becomes clear from what Shashi Tharoor writes in *India—From Midnight to Millennium*:[29]

> The road to disaster was, as usual, paved with good, even noble, intentions. In 1954, Prime Minister Nehru got the Congress Party to agree to work towards the creation of a 'socialist pattern of society'. Within a year, his principal economic adviser, the Strangelovian PC Mahalanobis, came up with the Second Five-Year Plan. This enshrined industrial self-sufficiency as the goal, to be attained by a state-controlled public sector that would dominate the 'commanding heights' of the economy. The public sector would be financed by higher income, wealth and

> sales taxes on India's citizenry. India would industrialise, Indians would pay for it, and the Indian government would run the show.

Of course, Tharoor's book was published in 1997, much before he joined the Congress Party. High taxes were a very important part of Big Government. In fact, there was a time in the early 1970s when the highest marginal rate of tax had stood at 97.75 per cent. As the then Finance Minister, Yashwantrao Chavan, said in the budget speech he made introducing the budget for 1974-1975:

> The [Direct Taxes Enquiry] Committee has expressed the view that [the] prevalence of high rates is the first and foremost reason for tax evasion, because this is what makes the evasion, in spite of attendant risks, profitable and attractive. The Committee has, accordingly, recommended that the maximum marginal rate of income tax, including surcharge, should be brought down from its present level of 97.75 per cent to 75 per cent. Simultaneously, there should be a reduction in tax rates at the middle and lower levels.

What this meant was that if you were earning above a certain level, almost 100 per cent of your income would have been taxed. In fact, Gurcharan Das recounts a very interesting conversation that he had with Piloo Mody, a Member of Parliament from the erstwhile Swatantra Party, about JRD Tata: "He is not wealthy. All the Tata shares are in trusts…. Whatever he inherited personally, he has also put that into a trust. In any case, he pays ninety-seven per cent of his earnings [as] income tax; then, he pays wealth tax, and this takes his tax rate to over one hundred per cent. His entire income goes in taxes, and he has to sell some assets each year to live on."

Given such high rates of income tax, it wasn't really surprising that many people who could decided not to pay any tax, and a huge black economy emerged over the years. Black money is essentially money which has been earned, but on which taxes have not been paid. Estimates made by the National Institute of Public Finance and Policy suggest that, by the 1980s, black money accounted for nearly one-fifth of the Indian economy (see Table 1.2).

Table 1.2: Estimate of black money between 1975 and 1984.

Year	Estimated Amount (in Rs. crore)	Per cent of GDP
1975-76	9,958 to 11,870	15 to 18
1980-81	20,362 to 23,678	18 to 21
1983-84	31,584 to 36,784	19 to 21

Source: Finance Ministry's *White Paper on Black Money*, 2012.

This is a problem that India is still grappling with, as we shall see in Chapter 9.

****

Also, it needs to be mentioned here that it is fashionable to criticise Nehru these days for much of what ails India. Nevertheless, it is important to remember that those were the days when the propaganda surrounding the Soviet Union was very strong. Even the Americans fell for it.

For many years, the most widely used economics textbook all over the world was written by the American economist Paul Samuelson. Samuelson, in different editions of his textbook, maintained for a very long period of time that, in the years to come, the Soviet economy would grow bigger than that of the United States.

As Daniel Acemoglu and James A Robinson write in *Why Nations Fail – The Origins of Power, Prosperity and Poverty*:[30]

> The most widely used university textbook in economics, written by Nobel Prize-winner Paul Samuelson, repeatedly predicted the coming economic dominance of the Soviet Union. In the 1961 edition, Samuelson predicted that Soviet national income would overtake that of the United States possibly by 1984, but probably by 1997. In the 1980 edition, there was little change in the analysis, though the two dates were delayed to 2002 and 2012.

Of course nothing of this sort happened, and the Soviet Union broke up in December 1991. But those were the days, and the narrative framed around the success of the Soviet style of economics, driven by its Five-Year Plans, was very popular. Samuelson was not the only one to be seduced by it. In fact, an entire generation was.

The trouble, as Acemoglu and Robinson point out, was: "In reality, what got implemented in [the] Soviet Union had little to do with the Five-Year Plans, which were frequently revised and written or simply ignored. The development of industry took place on the basis of commands by Stalin and the Politburo, who changed their minds frequently and often completely revised their previous decisions."[31]

Closer to home, Jawaharlal Nehru was also a great fan of the Soviet style of economic development. So, India had its own set of Five-Year Plans. The Second Five-Year Plan (1956-1961) put into practice the idea of economic growth driven by public sector enterprises. The idea was that the government running businesses would ensure that Indians could control their own well-being.

As Tharoor puts it:[32]

> The logic behind this approach [was]… the conviction that items vital for the economic well-being of Indians must remain in Indian hands—not the hands of Indians seeking to profit from such activity, but the disinterested hands of the state, that *father and mother* [emphasis added] to all Indians. It was sustained by the assumption that the public sector was a good in itself; that, even if it was not efficient or productive or competitive, it employed large numbers of Indians, gave them a stake in worshipping at Nehru's 'new temples of modern India'…. In this kind of thinking, performance was not a relevant criterion for judging the utility of the public sector.

The lack of a performance criterion also led to a situation where public sector enterprises were set up but never got around to producing what they were meant to. Take the case of Hindustan Fertilizers Ltd.

Charles Wheelan talks about the company in his book *Naked Economics—Undressing the Dismal Science.* As he writes:[33]

> By 1991, the Hindustan Fertilizer Corporation had been up and running for twelve years. Every day, twelve hundred employees reported to work with the avowed goal of producing fertilizer. There was just one small complication. The plant had never actually produced any saleable fertilizer. None. Government bureaucrats ran the plant using public funds; the machinery that was installed never worked properly.

The fertilizer factory was set up at a cost of $1.2 billion and over a period of seven years, but it produced no fertilizer. Nevertheless, there was a canteen, an accounts department and a personnel department. Apart from this, promotions, pay rises and audits also happened.[34] It was totally surreal.

Nehru's public sector system as it evolved ensured that workers came in every day and the government kept paying their salaries. As Wheelan writes: "The entire enterprise was an industrial charade. It limped along because there was no mechanism to force it to shut down. *When the government is bankrolling the business, there is no need to produce something and then sell it for more than what it cost to make* [emphasis added]."[35]

In fact, even in factories which produced something, productivity was horrible, to say the least. Productivity is essentially output per unit of input. Take the case of Steel Authority of India Ltd. (SAIL). The government's main steel producer employed 2.47 lakh people to produce six million tonnes of steel in 1986. In comparison, the Pohan Steel Company of South Korea employed just 10,000 individuals to

produce 14 million tonnes, or two and half times the steel produced by SAIL, during the same year.[36]

Given this, it wasn't surprising that the public sector enterprises worked in a very inefficient way. In 1992-1993, of the 237 public sector enterprises in operation, 104 were loss incurring. The losses amounted to Rs. 4,000 crore in total.[37] If we were to adjust this for the consumer price inflation that has prevailed between then and now, it amounts to a little over Rs. 19,300 crore as of March 2015.

As mentioned earlier in the chapter, the losses of the 77 loss-incurring public sector enterprises in 2014-2015 stood at around Rs. 27,360 crore. This means that, between 1992-1993 and 2014-2015, the losses of the public sector enterprises had gone up by close to 42 per cent.

The irony is that, unlike many other things, free India did not inherit public sector enterprises from the British when they left India in 1947. When the First Five-Year Plan was launched in 1951, there were just five public sector enterprises. Yes, you read that right—there were just five public sector enterprises in 1951! The total investments of these companies added up to just a minuscule Rs. 2.9 crore. By 1985, the number of public sector enterprises was around 200. They had a total paid-up capital of more than Rs. 17,562 crore. All of this had been contributed by the government.[38]

The question to ask is: How did the number of public sector enterprises jump from five in 1951 to 200 in 1985? The Nehru-Mahalanobis model of economic growth did not have much role for private enterprise in it. One reason for this was the assumption that the private companies would have neither the money nor the risk appetite in setting up companies in sectors like steel, which would have long gestation periods. Hence, the government would have to set up public sector enterprises.

But, over a period of time, the logic changed and went way beyond what it was originally meant to be. As Dwijendra Tripathi writes in *The Oxford History of Indian Business*: "As the socialistic rhetoric became shriller, public sector enterprises intruded into the consumer-oriented sectors as well, such as drugs, hotels and goods-processing industries, with the avowed objective of ensuring easier availability of vital articles of mass consumption."[39]

A good example of this is Modern Food Industries, which was set

up in the mid-1960s to make and sell bread. The company was finally sold by the Atal Bihari Vajpayee government to Hindustan Lever Ltd. (now Hindustan Unilever Ltd.) in January 2000.

Other than the government getting into consumer-oriented industries, it also started taking over sick private companies, in order to ensure that jobs were not lost. These were largely cotton mills.[40]

Close to where I live in Central Mumbai, there is the National Bicycle Corporation of India. The company was established in 1939 by the Birla Group. A few decades later, the company started to incur losses, and it was taken over by the government in 1974. It was nationalised in 1980.

Furthermore, when the British left India, a few British-owned firms continued to operate in India. But, over the years, they found it difficult to continue to operate, primarily because of the web of regulation that the Indian government had built around private enterprise. These firms were also taken over by the Indian government.

These included some of the biggest firms of the pre-Independence era, such as Andrew Yule and Co., Bird Hilgers and Co., Balmer Lawrie and Co., Jessop and Co., Braithwaite and Co., Richardson Cruddas, Mazagon Docks, Hooghly Docking and Engineering Company, and Smith Stanistreet Pharmaceuticals. As Tripathi writes: "Producing heavy and light engineering goods, transportation equipment and drugs, their continuance was considered vital for the nation-building programmes."[41]

These reasons essentially ensured that the government was running all kinds of businesses. As Tripathi writes:[42]

> In the process, the public sector emerged by the mid-1980s as a vast conglomerate of heterogeneous industries—a virtual leviathan dominating almost every major contour of the nation's business. The wide range of products and activities of the enterprises falling in this sector included manufacturing of steel, mining of coal and minerals, extraction and refining of crude, manufacturing of heavy machinery and machine-building equipment, machine tools and instruments, heavy electronic equipment for thermal and hydel stations, transportation equipment, telecommunication equipment, ships, submarines, fertilizers, drugs and pharmaceuticals.

And there was more. "The consumer items produced by the public sector undertakings included textiles, bread, newsprint, paper, footwear and contraceptives. The public sector also operated in the

area of air, sea, river and road transport, large-scale trading and construction services, and the hospitality industry…. The list would be larger if we include the banks, financial institutions, and insurance companies," writes Tripathi.[43]

Given the wide array of businesses that the government chose to operate in, it isn't surprising that it ended up creating a mess by the mid-1980s. The situation has only got worse since then. One possible explanation for this might lie in the fact that, earlier, the smartest lot used to work for the government. If you were to look at the engineers who worked for public sector enterprises throughout the 1970s, 1980s and 1990s, most of them had passed out of Regional Engineering Colleges (RECs) located in different parts of the country.[i]

After the economy opened up, from 1991 onwards, people started looking at other options, as the number of jobs offered by the private sector in sectors as diverse as banking and telecommunications exploded. The private sector also offered extra incentives to their best performers. The government meanwhile continued following a uniform pay scale.

As Wheelan writes: "This uniform pay scale creates a set of incentives the economists refer to as adverse selection."[44] What does the term mean in this context? The most talented professionals who had earlier worked for the government now had the option of working for the private sector, where their pay was closely linked to their productivity, unlike with the government.

On the flip side, as Wheelan puts it, "for the least talented, the incentives are just the opposite".[45] They know that working for the government would mean a fixed salary and regular increments over the years, which would not 'really' depend on their performance. Hence, those who have ended up working for the government over the last couple of decades were definitely not the best of the lot.

But this is more of a short-term reason. Over the longer term, other factors were at work as well. After Indira Gandhi became Prime Minister in 1966, the socialistic instincts of the government increased dramatically. In 1969, fourteen banks were nationalised. After 1969, 131 public sector enterprises were set up. The trouble was that the bureaucrats who ran the government had no experience in running businesses. The bureaucratic system which India had inherited from the British and with which it more or less continued was not trained

to manage profit-making businesses.[46] It still isn't.

This reason is of immense importance, given that even though the public sector enterprises were run by trained and capable individuals in many cases, the real decision making was carried out by the bureaucrats (read as IAS officers), who had absolutely no experience in running businesses. This is something that continues to hold good even today. Having said that, there are honourable exceptions, like Jagdish Khattar, who did a fantastic job of running Maruti Suzuki Ltd.

Furthermore, as the government got into the consumer-oriented sectors, it found out that it could not compete with the much nimbler private sector companies already operating in these sectors. Take the case of Scooters India Ltd., a company set up in the early seventies, which could never really take on Bajaj Auto. The company, based out of Lucknow in Uttar Pradesh, is still around, and made a profit of a little over Rs. 11 crore in 2014-2015.

The point being made is that the government couldn't really compete in the consumer-oriented sectors. This became even more obvious after the economy was opened up in 1991 and the private sector was allowed into many sectors it wasn't previously allowed into. As TN Ninan writes in *The Turn of the Tortoise*: "The last quarter century's experience has shown that when the private sector is asked to provide telecom services, run airlines and airports, build and run ports, undertake banking, distribute electricity and even undertake water supply, the result is usually (though not always, for there is no shortage of private banks and airlines that have failed) a substantial improvement on what the government was doing until then."[47]

The fact that the government has been ready to bail out the loss-incurring public sector enterprises and that the best people don't work for it anymore has led to a situation wherein the losses have just kept piling up. In fact, in sectors where the private sector has been allowed entry, it has flourished, and the government companies have had to take a back seat.

****

As mentioned earlier, the Nehru-Mahalanobis model of growth did not have much role for private enterprise in it. It assumed that the government-led public sector enterprises would get around to producing everything, which they did. The government produced everything, from colas (the infamous Double Seven, after Coca Cola

was forced out of India in 1977) to condoms (the Moods brand manufactured by HLL Lifecare, formerly known as Hindustan Latex). The only problem was that it did not go about doing so efficiently.

As Sanyal writes: "The whole approach was based on a mechanical view of the world that simply assumed away the role of private enterprise. There was no place… for the messy, organic process of risk-taking and innovation that drives economic progress."[48]

This can be very well made out from the fact that, for many years, Indians had access to only two models of cars—the Ambassador and the Premier Padmini (better known as the Fiat). Even the engine of the Ambassador remained unchanged for a few decades. This lack of choice comes out very clearly in the 1977 song *Ek Akela is Shehar Main*, from the movie *Gharaonda*, shot beautifully in what was then Bombay.

Some 3 minutes and 26 seconds into the song, there is a shot of Marine Drive. The road is full of Premier Padminis and Ambassadors. If you look carefully enough, there is actually a white Mercedes somewhere.

This image captures the lack of progress on the technological front very beautifully. As Sanyal writes: "Technology was seen as an external input that could be mandated by the mandarins of the Planning Commission rather than as a process of generation and diffusion of new ideas. Unfortunately, Mahalanobis did not appreciate the fact that all economies are evolving eco-systems that have less in common with Newtonian mechanics and more with ecological biology —mutations, symbiotic interlinkages… and the survival of the fittest."

The Nehru-Mahalanobis model clearly did not work, and for many years the Indian economic growth was very slow. In fact, the economist Raj Krishna, who taught at the Delhi School of Economics, termed this slow growth as the 'Hindu Rate of Growth'.

The current Vice-Chairman of NITI Aayog, Arvind Panagariya, feels that the term had its origin in an essay which was published in the February 1973 edition of the *Economic & Political Weekly*.[49] This essay was titled 'Some Philosophic Aspects of the Approach' and was authored by Najinyanupi (possibly a pseudonym).

As the author writes:[50]

> At one time, it was believed that the Hindu view of life had an answer to the problems of Western society and that, therefore, we could in this country achieve a synthesis of Western economic development and this view of life. What is not realised in this appreciation of the situation is that we have enough evidence to show that with high rates of growth, the Hindu view of life breaks down in the Indian situation itself. Thus, those areas of our country or those sections of our population whose own condition has improved at a faster than 3-4 per cent rate of growth have not been protected by the Hindu outlook from the evils and temptations of the Western way of life. The older among them have already yielded to wife swapping and the younger to delinquency and drugs.
>
> At the other extreme, we have the evidence of the effect of the Hindu view of life on those among the West who have embraced it of late. They are the dropouts in Western society who do not have any more faith in economic development and who have voluntarily brought down their own rate of growth to the permissible range. In fact, it is because the West is in a position where it has seriously to consider a zero rate of growth that the Hindu way of life is attractive to them. To the extent we ourselves achieve a faster rate we will find this outlook getting seriously distorted. The rate of growth chosen, therefore, is the one that ideally fits in with the preservation of our traditions.

The so-called Hindu Rate of Growth averaged at around 3.5 per cent between 1950 and 1980. This was the time when countries in South-East Asia and countries like South Korea were making giant economic strides. As Tharoor writes: "Countries in South-East Asia were growing at 8 to 15 per cent, or even more. Exports of manufactured goods grew at an annual rate of 0.1 per cent until 1985; India's share of world trade fell by four-fifths. Per capita income, with a burgeoning population and a modest increase in GDP, anchored India firmly to the bottom third of the world rankings. The public sector, however, grew in size, though not in production, to become the largest in the world outside the Communist bloc."

It needs to be pointed out here that the Nehru-Mahalanobis model wasn't the only economic growth model that was put forward at that point of time. There was another model which was proposed but largely ignored. This idea was influenced by Henry Ford, owner of the Ford Motor Company in the United States. In January 1914, Ford doubled the salary of his workers, so that they could buy the cars they were producing.

As Eduardo Porter writes in *The Price of Everything*: "Facing low worker morale and high turnover on the production line in January 1914, Henry Ford raised wages to five dollars a day, doubling at a stroke most workers' pay…. It worked…. After the pay hike, Ford was churning out 15 per cent more cars per day with 14 per cent fewer workers."[51]

The logic came from Say's Law. This law was put forward by Jean-Baptiste Say, a French businessman who lived between 1767 and 1832. As John Kenneth Galbraith writes in *A History of Economics—The Past as the Present*:[52]

> Say's law held that out of the production of goods came an effective aggregate of demand sufficient to purchase the total supply of goods. Put in somewhat more modern terms, from the price of every product sold comes a return in wages, interest, profit or rent sufficient to buy that product. Somebody, somewhere, gets it all. And once it is gotten, there is spending up to the value of what is produced.

Say's Law essentially states that the production of goods ensures that the workers and suppliers of these goods are paid enough for them to be able to buy all the other goods that are being produced. A pithier version of this law is "Supply creates its own demand".

The economists CN Vakil and PR Brahmanand based their vision of the Indian economy around this. Their basic point was that India lacked capital to set up big businesses, but what it had was plenty of people. And it is these people who needed to be encouraged to get into business.

These economists essentially suggested that the people needed to be encouraged to produce wage goods, or simple consumer products, like clothes, toys, shoes, radios, bicycles, etc. As Das writes: "The low-capital, low-risk businesses would attract loads of entrepreneurs, for they would yield quick output and rapid returns on investments. Labour would produce the goods it would eventually consume with the wages it earned in producing the goods…. The idea was similar, in a sense, to that of Henry Ford, who paid his workers generously so that they could afford to buy his cheap, mass-produced cars."[53]

This theory was nowhere as grand as the Nehru-Mahalanobis vision for India, and it was soon confined to the dustbins of history. What Vakil and Brahmanand proposed would have pushed investments into agriculture, agro-industry, rural infrastructure and simple consumer goods. But this would have meant no creation of the 'new temples of modern India'.

This basic understanding of things somehow eluded Nehru and Mahalanobis, and India got what it did. While India did need public sector enterprises to carry out capital-heavy and long-gestation-period businesses, private enterprise also needed to be encouraged. With the benefit of hindsight, it can safely be said that the story that would have emerged would have been completely different. Big Government

wouldn’t have been the order of the day.

---

[i] The RECs are now known as the National Institutes of Technology.

2.WE HAVE SPREAD THEM TOO WIDE AND TOO THIN

PSU

> State ownership! It leads only to absurd and monstrous conclusions; state ownership means state monopoly… and that state brings only ruin and bankruptcy to all.
>
> – Benito Mussolini

One of the first things I learnt in journalism was to think of a headline first. The idea was very simple. Given the lack of space in a newspaper, if you thought of a headline before writing, then the entire article could be written in a way which justified the headline. This would make for a smoother read than something which was all over the place.

Nevertheless, this is a technique often used even in longer forms of writing (from essays to features to books) to justify the writer's point of view, or perhaps a bias at times. To put it bluntly, it does not take into account any point of view other than the writer's. If there is any evidence contrary to what the writer is trying to say, it is simply ignored and left out. Nothing should come in the way of a coherent argument.

In the previous chapter, I talked about how the top ten loss-incurring public sector enterprises were responsible for 85 per cent of the total losses that the loss-incurring government companies incurred in 2014-2015. I also pointed out that 77 out of the 234 public sector enterprises incurred losses in that same year. But I did not say anything about those public sector enterprises which are actually very profitable.

Take a look at Table 2.1. It shows the top 10 profit-making public sector enterprises run by the central government in 2014-2015.

Table 2.1: The top ten profit-making CPSEs during 2014-2015.

Sr. No.	Name of Company	Net Profits (in Rs. crore)	% age of Total Profits
1	Oil & Natural Gas Corporation Ltd.	17,733	22.7
2	Coal India Ltd.	13,383	17.2
3	NTPC Ltd.	10,291	13.2
4	NMDC Ltd.	6,422	8.2
5	Power Finance Corporation Ltd.	5,959	7.6
6	Indian Oil Corporation Ltd.	5,273	6.8
7	Rural Electrification Corpn. Ltd.	5,260	6.7
8	Bharat Petroleum Corporation Ltd.	5,085	6.8
9	Power Grid Corporation of India Ltd.	4,979	6.4
10	South Eastern Coalfields Ltd.	3,660	4.7
	Total Profits	**78,045**	**59.9**
	Net Profits of Profit-Making CPSEs	**1,30,363**	**100.00**

Source: Public Sector Enterprises Survey, 2014-2015.

The top 10 profit-making public sector enterprises made Rs. 78,045 crore as profits. This was close to 60 per cent of the profit made by the profit-making public sector enterprises. This was significantly more than the losses made by the top 10 loss-incurring public sector enterprises, which had stood at Rs. 23,380 crore.

How do things look if we compare the total profits with the total losses? The total profit made by the profit-making public sector enterprises in 2014-2015 stood at Rs. 1,30,363 crore. The total losses made the loss-incurring public sector enterprises stood at Rs. 27,360 crore. Hence, the total profit of the CPSEs stood at Rs. 1,03,003 crore.

Hence, on the whole, things seem to be good. If we were to look at the government as a venture capitalist or a private equity firm, then everything seems to be fine. It has laid a given number of bets, of which some seem to be working and some don't. So why complain? Well, first and foremost, the government is not a private equity firm or a venture capitalist. Secondly, it is important to look at the profit that the public sector enterprises make in the context of the total amount of money (i.e., capital) that the government has had to invest to make this profit. Thirdly, every extra public sector enterprise that the government chooses to manage takes away attention from other important things that need more government attention than managing a public sector enterprise.

Let's look at the list of the top 10 profit-making public sector enterprises. Almost all the companies on the list operate in areas where there is almost no or perhaps very little competition from the private sector.

This is in line with what Dwijendra Tripathi writes in *The Oxford History of Indian Business*:

> The profit before interest and taxes as the percentage of capital employed in the public sector remained on an average very low—between 10 and 15 per cent—during all these years…. Few of the profit-making units were operating in a *competitive framework* [emphasis added]; the bulk of the profits came from companies operating in sectors in which the public sector enjoyed a near *monopoly* [emphasis added] position.

Take a look at Table 2.2, which is a sector-wise profit/loss list of the public sector enterprises.

One look at the table makes it clear that the public sector enterprises do well in sectors where they have a monopoly, more or less. Over the years, the public sector enterprises have made most of their profits in the coal and oil sectors, where they have a monopoly (actually a complete monopoly in the coal sector and very little competition in the oil sector).

Table 2.2: Sector-wise profits/losses of CPSEs between 2012-2013 and 2014-2015.

Sr. No.	Sector/Cognate Group	Net Profit/Loss (–) (in Rs. crore)		
		2014-15	2013-14	2012-13
	Agriculture			
1	Agro-Based Industries	–109	–106	–99
	Sub-Total	–109	–106	–99
	Mining			
2	Coal	26,718	29,895	26,352
3	Crude Oil	22,115	29,332	28,060
4	Other Minerals & Metals	8,291	7,973	8,025
	Sub-Total	57,124	67,201	62,437
	Manufacturing			
5	Steel	2,299	3,089	2,618
6	Petroleum (Refining) & Marketing	15,114	17,869	10,222
7	Fertilizers	270	–543	10,146
8	Chemicals & Pharmaceuticals	–496	–496	–439
9	Heavy Engineering	1,061	3,686	6,543
10	Medium & Light Engineering	–161	52	–279
11	Transportation Equipment	3,043	3,404	3,567
12	Consumer Goods	–2,525	–1,406	–1,371
13	Textiles	–418	–278	–22
	Sub-Total	18,187	25,377	30,985
	Electricity			
14	Power Generation	19,701	18,792	20,928
15	Power Transmission	5,028	4,541	4,213
	Sub-Total	24,729	23,333	25,141
	Services			
16	Trading & Marketing	285	311	408
17	Transport Services	–2,776	–4,244	–4,241
18	Contract & Construction Services	1,256	1,465	991
19	Industrial Development & Tech. Consultancy Services	1,044	1,149	1,313
20	Tourist Services	111	41	25
21	Financial Services	14,168	12,824	11,116
22	Telecommunication Services	–11,016	945	–13,094
	Sub-Total	3,072	12,491	–3,482
	Grand Total	**1,03,003**	**1,28,295**	**1,14,981**

Source: Public Sector Enterprises Survey, 2014-2015.

In 2014-2015, the public sector enterprises operating in coal and oil made around 47.4 per cent of the total profit made by public sector enterprises. It is interesting to see that in those sectors where there is a reasonable amount of competition from private sector companies, the public sector enterprises tend to do very badly.

Take a look at the telecommunication services. The public sector enterprises operating in this sector have lost more than Rs. 23,000 crore between 2012-2013 and 2014-2015.

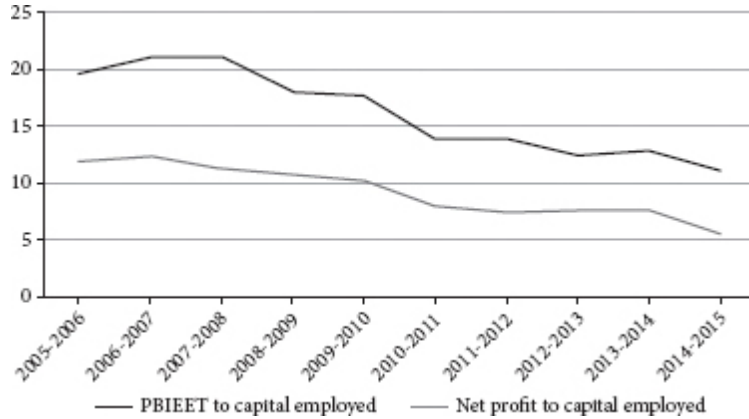
One sector where the public sector enterprises have faced a lot of private competition but have still managed to continue to make money is the banking sector, which is a part of financial services.

Nevertheless, as is clear from Table 2.2, profits had risen at a much slower pace between 2013-2014 and 2014-2015, than they had risen between 2012-2013 and 2013-2014. Also, as we shall see in Chapter 11, PSBs have a huge bad loans problem to deal with currently, which isn't going to go away in a hurry.

To cut a long story short, when public sector enterprises face competition from private companies, their performance tends to go for a toss. Also, Tripathi talks about the low returns on the capital employed for the public sector companies, which should be the right way of judging any company. Capital employed refers to the total amount of money put into a business in pursuit of profits. This is important because the same capital can be put to an alternative use, and hence, it is important to check whether it is generating sufficient returns.

Tripathi's book was published in 2004. Let's see how things have been since then. As can be seen from Figure 2.1, the return on the capital employed for the public sector enterprises has been falling over the years.

Figure 2.1: Return on capital employed for the CPSEs between 2005-2006 and 2014-2015.



PBIEET = Profit Before Interest, Exceptional, Extra-Ordinary Items and Taxes.
Source: Public Sector Enterprises Survey, 2014-2015.

The net profit to capital employed (the lower curve) has more or less halved during the decade between 2005 and 2015. This is primarily because of competition from the private sector companies. What this clearly shows is that the returns which the government earned on its investment in the public sector companies in 2014-2015 were less than what you and I earned on our fixed deposit investments. Hence, the government is not being adequately compensated for the risk that it is taking on.

In fact, this is not a new insight, and has been known in political circles for nearly a quarter of a century. This is something that the then Prime Minister, PV Narasimha Rao, said at the 79th Congress Plenary at Tirupati in 1992.

As Rao said: “We have invested over one lakh crore of rupees in the public sector so far. The returns therefrom, on the whole, have been very meagre. All this is the people’s money, no one else’s. The present situation is that the Government can no longer collect any more money from the people for further fresh investment in the public sector.”

Rao’s point was that the public sector was ultimately owned by the people. As he said: “What exactly is the public sector? It is, in fact, a sector owned by the State and run with the money belonging to the people. The profits and losses of the public sector, therefore, are the profits and losses of the people.”

The point being that the moment the state funds the losses of the public sector, it takes away money from other important sectors, like

education, health, infrastructure, etc. Furthermore, the government ends up stretching its meagre resources as well. As Rao said: “At the moment, the State has over-stretched its meagre resources and is seeking to do many things at the same time. As a result, it is unable to do anything adequately.”

This explains, to a large extent, why even 70 years after Independence, India still has the world’s largest illiterate population. And this has happened while the governments over the years have been busy running Air India, manufacturing condoms and scooters, and even selling soft-drinks (Double Seven).

Should the government really be doing these things? As Rao said in Tirupati in 1992: “The fact of the matter is that the overall resources at our disposal were themselves inadequate: we had to spread them too wide and too thin. In order, therefore, to shoulder the vital responsibility of human resource development adequately, the State must conserve its resources by withdrawing from various areas where private enterprise can replace it. Besides, the State has certain functions which belong to it by its very nature, such as defence, law and order, and governance.”

The lessons of what Rao said nearly 24 years back have still not been learnt.

More importantly, as mentioned earlier in the chapter, every extra public sector enterprise that the government chooses to run takes attention away from something more important. And that remains Big Government’s biggest problem.

****

Like any monopolist, the government is reluctant to relinquish the monopoly of operation it enjoys in certain sectors. Take the case of the coal sector. Private sector companies are not allowed to mine coal and sell it to those who need it. They can only mine coal for their own consumption. For example, a power company can own a coal mine and mine coal to use it to produce power in its thermal power plant.

The government-owned Coal India has a virtual monopoly and produces close to four-fifths of the coal mined in the country. Given the monopoly that it enjoys, the company is extremely profitable. In fact, as on March 31, 2015, the company had Rs. 47,269 crore of cash on its books. This cash is essentially the profit that the company has

managed to accumulate over the years.

Some of the Coal India subsidiaries, like Northern Coalfields and Mahanadi Coalfields, operate on extremely high margins. For the year ending on March 31, 2015, Northern Coalfields operated with an operating margin (operating profit divided by total revenue) of 34.3 per cent. On the other hand, Mahanadi Coalfields operated at an even higher margin of 40.7 per cent.

That these are very good margins there is clearly no doubt. But, despite this, the lack of competition in the coal sector has hurt the nation. In April 2016, Coal India had to hold back despatching coal because of the lack of demand caused by an industrial slowdown in India.

Of the targeted 51.5 million tonnes of off-take, only 42.5 million tonnes were picked up. But this is not how the situation has always been. In the past, the demand for coal had been significantly more than its supply. This happened for the simple reason that Coal India couldn't ramp up the production of coal fast enough to match the country's demand for coal.

Coal India produced 323.6 million tonnes of coal in 2004-2005. In 2013-2014, it produced 462.4 million tonnes of coal. The rate of production increased at an average annual rate of 4.1 per cent. The production of coal did not keep pace with the demand. During the same period, the total amount of coal imports increased from 29 million tonnes to 171 million tonnes, at an average annual rate of 21.8 per cent.

Furthermore, the price paid for the imported coal was higher than the price paid for the domestic coal. Every time coal was imported, precious foreign exchange was used. Also, in the process of importing coal, we ended up creating jobs in countries other than India.

It needs to be pointed out here that India has enough coal. As of April 1, 2014, the country had 301.6 billion tonnes of geological reserves of coal.[ii] Typically, not all of this is extractable. Around 80-95 per cent of the geological reserves can be extracted in open-cast mines. In the case of underground mines, because of the methodology followed, around 30-40 per cent of geological reserves can be extracted. So, the point is that India has enough coal going around. It just needs to be extracted.

A major reason for the slow increase in the total production carried out by Coal India lies in the low per-employee productivity. Coal India produces around 1,100 tonnes of coal per employee in a year. Now compare this with the 36,700 tonnes per employee produced by Peabody Energy, based out of the United States. The Chinese Shenhua Energy produces 12,700 tonnes per employee.[54]

Partha Bhattacharya, a former Chairman of Coal India, pointed out the need to create competition in the sector: "Multiple players that have both bandwidth and competence… [will turn] the current situation of acute coal shortage into one of abundance."[55]

The irony is that an average Coal India employee is extremely well paid. In a calculation I did in January 2015, I found that an average Coal India employee makes much more than an average employee of ICICI Bank.[56]

Take a look at Tables 2.3 and 2.4. In 2013-2014, an average Coal India employee made 34.9 per cent more than an average ICICI Bank employee.

This is surprising, given that Coal India largely has a semi-skilled workforce. As on December 1, 2014, out of a total workforce of around 3.38 lakh, the total number of workmen was at 2.86 lakh. And these Coal India employees get paid significantly more than they should be, given that they are largely semi-skilled.

Table 2.3: The average Coal India employee's salary between 2010-2011 and 2013-2014.

Year	Expenses on Employee Benefits (in Rs. crore)	Number of Employees	Average Employee Compensation
2010-2011	19,852	3,90,243	Rs. 5.1 lakh
2011-2012	26,387	3,77,747	Rs. 7 lakh
2012-2013	27,321	3,64,736	Rs. 7.5 lakh
2013-2014	27,769	3,52,282	Rs. 7.9 lakh

Source: Coal India, Annual Report, 2013-2014.

Table 2.4: The average ICICI Bank employee's salary between 2010-2011 and 2013-2014.

Year	Expenses on Employee Benefits (in Rs. crore)	Number of Employees	Average Employee Compensation
2010-2011	2,817	56,969	Rs. 4.9 lakh
2011-2012	3,515	58,276	Rs. 6 lakh
2012-2013	3,893	62,065	Rs. 6.3 lakh
2013-2014	4,220	72,226	Rs. 5.8 lakh

Source: ICICI Bank annual reports.

Hence, despite being well paid, the Coal India employees are not productive enough when it comes to mining coal. Of course, there are several reasons for this, but money clearly isn't one of them. The lack of mechanisation of the mines is definitely one reason for this low productivity. The lack of competition is another.

To summarise, government monopoly, which is an excellent example of Big Government, in a certain sector does end up hurting the country as a whole, even though the companies operating in that sector might individually be immensely profitable.

One thing that the government can do in order to create some competition in the sector is to dismantle Coal India. The company currently has eight subsidiaries, of which seven mine coal. One subsidiary, Central Mine Planning and Design Institute (CMPDI), as its clearly name suggests, doesn't produce coal.

These companies are allowed to operate in a certain geographical area, and they cannot mine coal in the area allotted to other companies. This artificial distinction should be done away with, and the companies should be allowed to mine coal all across the country. This would be a good starting point to create some competition within the sector if the government does not want the private sector to mine coal for commercial purposes.

****

Now let's get back to the loss-incurring companies. One argument that is often made is that the government cannot be looking to make a profit all the time. As a senior editor of a digital publication put it to me once, the government makes *Nirodh* condoms so that it can distribute it to those who need it. Hence, it needs a company like HLL Lifecare to make condoms.

This, I think, is a silly argument. Why can't the government just

buy condoms over the counter from private companies that make condoms? I am sure, given the huge size of the order, the government would get a very competitive price. Condoms aren't exactly missiles that the government needs to make them on its own. It doesn't have to run a separate company to do so. Just because the government has to deliver something to the citizens of the country doesn't mean that it needs to produce it as well.

Furthermore, the company that makes condoms for the government, HLL Lifecare, comes under the Ministry of Health and Family Welfare. India is facing a huge number of issues when it comes to health. As Jean Drèze and Amartya Sen write in *An Uncertain Glory —India and Its Contradictions*:[57]

> A particularly telling illustration relates to child immunisation. There is very little public awareness of the fact that India's immunisation rates are among the lowest in the world.... Except for the BCG vaccine, India's immunisation rates are uniformly lower than the corresponding estimates for every other South Asian country, including Nepal…. In contrast, Bangladesh has achieved immunisation rates of around 95 per cent for each vaccine.

Shouldn't the Ministry of Health and Family Welfare be tackling these kinds of issues rather than making condoms?

Let's take another look at the top ten loss-incurring public sector enterprises (as shown in Table 1.1 in the previous chapter). The top four loss-incurring companies, which are responsible for the bulk of the losses, operate in sectors in which they have competition from the private sector.

The fourth largest loss-incurring firm happens to be Hindustan Photo Films and Manufacturing Company. The question is: Why is the government still running a photo film company? The photo film was killed first by the digital camera and then by the mobile phone. Actually, the company doesn't make photo films any more. During 2012-2013 (the latest annual report that I could find), the total production of the company had stood at Rs. 3.6 crore. The sales had stood at Rs. 3.7 crore. Now imagine who in their right minds would run a company with sales of under Rs. 4 crore and which ends up with losses of more than Rs. 1,500 crore, as it did during the course of 2012-2013.

The third largest loss-incurring company was MTNL. It provides telecom services in Delhi and Mumbai. In both cities, there are many other telecom service providers which provide these services. So why should the government continue to be in such a business and lose

close to Rs. 3,000 crore in just a single year?

As far as Bharat Sanchar Nigam Ltd. (BSNL) is concerned, an argument is often made that the company provides telecom services in many areas where private players don't. I personally don't know how valid this argument is. Nevertheless, it still doesn't justify the company losing more than Rs. 8,200 crore in a single year.[iii]

Imagine what this extra Rs. 8,200 crore could do to the budget of the Department of Health and Family Welfare (under the Ministry of Health and Family Welfare), which currently stands at around Rs. 37,062 crore.

Every rupee that goes towards sustaining these companies is taken away from some other area. Take the case of agriculture. After the budget for 2016-2017 was presented in late February 2016, the government made a big song and dance about the budget being a farmer's budget.

But what it really did was essentially change the way it accounts for things. The economist Ashok Gulati explained this in a column in *The Financial Express* in March 2016. The Department of Agriculture, Co-operation and Farmers' Welfare spent Rs. 15,809 crore in 2015-2016.[58] The allocation for 2016-2017 has been increased to Rs. 35,983 crore. This is a jump of a whopping 127 per cent. Or so it seems.

But there was an accounting trick that the government used here. A jump of Rs. 15,000 crore in allocation is primarily because of the different allocation of subsidies on the short-term credit to farmers, which needs to be paid to banks. This allocation came under the Department of Financial Services earlier, and has been moved into the budget of the Department of Agriculture only in the 2016-2017 budget.

After we adjust for this new allocation, the actual jump in money being spent on agriculture and farmers is around 33 per cent more. The point being that even more 'real' money could have been allocated to agriculture and farmers if the government wasn't continuing to finance the losses of its public sector enterprises.

Getting back to BSNL and MTNL, given that the government wants to continue owning these companies, it should appoint outsiders with

extensive experience in telecommunications as the Chief Executives of these companies and give them a free hand in cutting their losses. The nation cannot continue to lose such a massive amount of money, which could be better utilised somewhere else.

Also, it needs to be pointed out here that the loss-incurring public sector enterprises could be used to generate revenue for the government in another way. As the Economic Survey for 2015-2016 points out: “Most public sector firms occupy relatively large tracts of land in desirable locations. Parts of this land can be converted into land banks and made into vehicles for promoting the ‘Make in India’ and Smart City campaigns. If the land is in dense urban areas, it could be used to develop eco-systems to nurture start-ups, and if located in smaller towns and cities, it could be used to develop sites for industrial clusters.”

In fact, the government first needs to get the public sector enterprises to do a proper inventory of the total area of land that they own. This land then needs to be gradually sold and the money thus generated can go into an infrastructure fund, which could be used to build physical infrastructure like roads, bridges, railways, ports, etc.

While the Modi government has talked about this (given that it is a part of the Economic Survey), no concrete steps have been taken until now. One reason for this is perhaps the fact that Modi had revived a few state-level public sector enterprises when he was the Chief Minister of Gujarat. And he perhaps believes that he can repeat the same at the national level as well.

But, more than two years down the line, this doesn’t seem to be the case. Over the years, there seems to have been a general reluctance on the part of the government to privatise public sector units, i.e., sell out on them, lock, stock and barrel.

In fact, genuine privatisation (where the government sells out a substantial share of the company and does not continue to manage it; this is referred to as strategic sale in government terminology) has generated very little revenue for the government over the years.

It is worth pointing out here that, of the total of the Rs. 1.9 lakh crore revenue that the government had generated through the disinvestment route between 1991 and late 2015, only Rs. 6,344 crore has come through the strategic sale of equity. And this happened between 1999 and 2004, when Atal Bihari Vajpayee was Prime

Minister and Arun Shourie the Disinvestment Minister.[59]

I think another major reason that only minor genuine privatisation seems to have taken place lies in the fact that every government has to accommodate many leaders as ministers. This has especially been true since the 1990s, when coalition governments became the norm in India.

After all, how good is a minister with no public sector enterprises under him? Take the case of the Civil Aviation Minister. How much value would he have with Air India not continuing to be government owned? Or how much value would the Telecom Minister have without MTNL and BSNL, the two government-owned telecom companies?

Ministers are known to use the public sector enterprises for their personal use. An excellent example of this is how Dayanidhi Maran of the DMK party milked the Telecom Ministry when he headed it. Hence, understandably, there is a resistance at the level of the ministers in the government as well as bureaucrats to the entire idea of genuine privatisation. While Modi's government is also a coalition government, the BJP has the numbers to run the government on its own. Hence, it is not really dependent on its coalition partners, unlike almost every government before it was since 1989.

Furthermore, there is always the fear of employee trade unions, which tend to punch much above their weight. As the Economic Survey of 2015-2016 points out: "In many cases where public sector firms need to be privatised, the problems of exit arise because of opposition from existing managers' or employees' interests."

This explains why the government continues to run loss-incurring public sector enterprises when it should be concentrating on so many other things that need its more immediate attention.

****

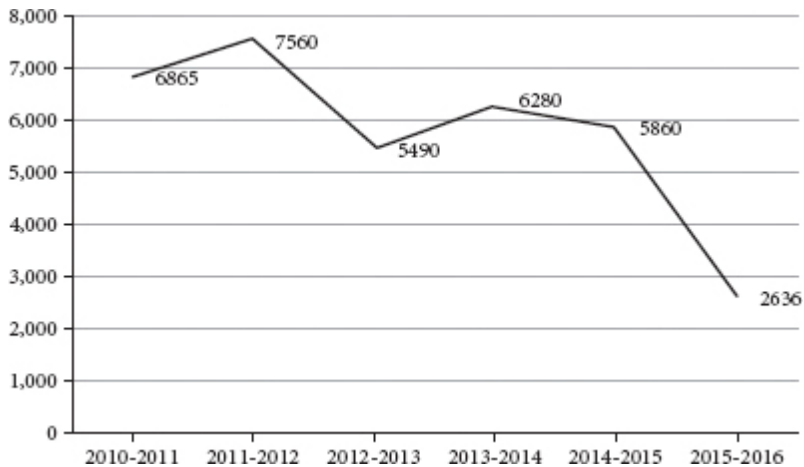
There is one particular company which I would like to discuss in some detail, and that is Air India. There are some businesses that the government should simply stay out of. The airline business is one such business. As the legendary investor Warren Buffett put it:[60]

> The worst sort of business is one that grows rapidly, requires significant capital to engender the growth, and then earns little or no money. Think airlines. Here a durable competitive advantage has proven elusive ever since the days of the Wright Brothers. Indeed, if a farsighted capitalist had been present at Kitty Hawk, he would have done his successors a huge favor by shooting Orville

> down. The airline industry's demand for capital ever since that first flight has been insatiable. Investors have poured money into *a bottomless pit* [emphasis added], attracted by growth when they should have been repelled by it.

And a bottomless pit is what Air India has turned out to be. The accumulated losses of Air India between 2010-2011 and 2015-2016 amount to Rs. 34,690 crore (see Figure 2.2). Every year, to keep the airline going, the government has to pour more money into it.

Figure 2.2: Losses of Air India between 2010-2011 and 2015-2016 (in Rs. crore).



Source: Public Sector Enterprises Surveys; and Ministry of Civil Aviation.

In fact, in 2015-2016, the airline suffered a net loss of Rs. 2,636 crore even though it made an operating profit of Rs. 8 crore. The Minister of Civil Aviation, Ashok Gajpathi Raju, said in the Lok Sabha in early May 2016 that the airline was able to cut operational expenses by almost 11 per cent during the course of the year, and hence, run an operational profit.

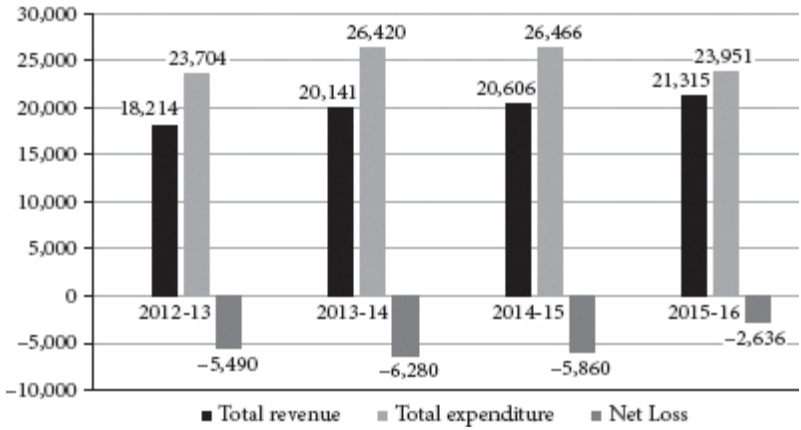
Anyone who has studied the basics of finance knows that operational profit and net profit are two entirely different things altogether. Operational profit is the profit that a company makes from its business operations. After this, the company needs to pay interest on its debts as well as taxes to the government. What remains is the net profit.

Given the loss of Rs. 2,636 crore, the government would have had to pour money into Air India in 2015-2016, like it had in the previous years as well. In fact, until March 2016, the government had already poured Rs. 22,280 crore into Air India. For 2016-2017, an equity

infusion of Rs. 1,713 crore has already been approved.

The question to ask is how the airline managed to bring down its losses to Rs. 2,636 crore in 2015-2016 from Rs. 5,860 crore in 2014-2015. Take a look at Figure 2.3.

Figure 2.3: Revenue and expenditure of Air India between 2012-2013 and 2015-2016 (in Rs. crore).



Source: A written answer provided by Mahesh Sharma, the then Minister of State for Civil Aviation, to the Lok Sabha on April 28, 2016.

The Civil Aviation Minister wanted us to believe that operational efficiencies were at work and that these helped Air India turn in a better performance. But was that really the case?

As can be seen from Figure 2.3, the total revenue of Air India has been growing at a very slow pace since 2012. In fact, between 2014-2015 and 2015-2016, the airline managed to increase its sales by just 3.4 per cent.

This isn't surprising, given that it continues to lose its market share. In 2013-2014, Air India had a domestic market share of 19 per cent. Since then, it has fallen to 16 per cent (as of February 2016). The airline continues to have a brand image problem and is the airline of preference of very few people.

That apart, the airline has managed to bring down its expenditure by 9.5 per cent, or by Rs. 2,515 crore, between 2014-2015 and 2015-2016. The question is: How has this happened? The simple answer to this lies in the fact that jet fuel prices have fallen during the course of the financial year 2015-2016 and the airline has benefited tremendously because of this.

In May 2015, the jet fuel price was $1.84 per gallon. By March 2016, this had fallen to $1.07 per gallon. In fact, the price was even lower, at $ 0.93 per gallon, in January 2016. Hence, lower jet fuel prices helped the airline bring down its losses.

Furthermore, a March 2016 newsreport quotes an Air India official as saying that in 2015-2016, the fuel bill of the company would be around Rs. 5,700 crore, which would be significantly lower in comparison to the Rs. 8,200 crore bill that the company ran up in 2014-2015.[61]

What does this mean? The company saved Rs. 2,500 crore because of lower fuel costs. And how much did the total expenditure of the airline fall by? Rs. 2,515 crore, as mentioned earlier.

Hence, the expenditure of the airline has fallen primarily because of lower fuel prices. And this has helped the airline to lower its net losses and at the same time make an operational profit. The figures make me wonder: What operational efficiency was the Civil Aviation Minister talking about?

Furthermore, lower fuel prices are not within the control of the airline. As soon as prices start to go up, the airline's losses will start to increase as well and its meagre operational profit will turn into a loss.

In a reply to the Lok Sabha, the then Minister of State for Civil Aviation, Mahesh Sharma, offered a range of reasons as to why Air India incurs losses. High fuel price was one reason. But this impacts all airlines and not just Air India. If high fuel prices were an issue, how did Indigo (a low-cost airline) make profits all these years? Furthermore, this cannot be a reason for 2015-2016, when jet fuel prices fell dramatically.

Sharma also offered other reasons for the non-performance of the airline. One reason offered was the high airport usage charges. These charges are not just borne by Air India. Other airlines shell out for these as well, which, in turn, are recovered from the end consumer.

Sharma then said that competition from low-cost carriers is another reason why the airline is losing money. But this is true for all other airlines which are operating in the market. The competition is not just specific to Air India.

Sharma, in his reply, also blamed the weakening of the Indian

rupee for the extreme losses suffered by Air India. Jet fuel has to be imported, and if the rupee weakens against the dollar, the cost of jet fuel also goes up. Nevertheless, this is a risk faced by every airline in the world which does not earn a major portion of its revenue in dollars and which has to buy jet fuel priced in dollars (i.e., import it). If the local currency depreciates (i.e., loses value) against the dollar, jet fuel is bound to get expensive. Hence, the risk is not just specific to Air India. Also, there are ways an airline can go about hedging these risks.

One genuine reason which Sharma offered was the high interest burden of the airline. As on March 31, 2015, the airline already had a debt of Rs. 51,367 crore.

The point is that Sharma came up with many reasons, except for the fact that the government does not know how to run an airline. Should a government be running an airline in the first place? It is a difficult business to be in, as even Warren Buffett has admitted. Nevertheless, if the government can make condoms, it can surely run an airline, can't it?

And honestly, any other minister in his place would have come up with the same set of excuses. The fact of the matter is that a civil aviation minister without Air India coming under him would essentially be useless.

In fact, like in the case with BSNL, a similar reasoning is offered in order to keep Air India going. The private airlines don't like to service non-profitable routes. Fair enough! Then the government does not need to run an airline as big as Air India. It can cut down on its services and try running a smaller airline on the routes which are not well connected by private airlines because they are not profitable.

In this case, even if there are losses, they would be limited, and the government would fulfil its social obligations. It beats me, though, as to how running an airline is a social obligation.

Lastly, the Rs. 8 crore operational profit that the airline has made during 2015-2016 will be used as a vindication to show the revival of the airline and an excuse to keep it running. Nevertheless, as soon as fuel prices start to go up, the losses will definitely increase. The taxpayer will continue to bail out the airline.

Be rest assured of that!

[ii] Source: http://coal.nic.in/content/coal-reserves.

[iii] BSNL seems to have done a little better in 2015-2016. At the time of writing this, statements made by the Telecom Minister and the Prime Minister suggest that the company made an operating profit during the course of the year.

3. PERFECT IS THE ENEMY OF GOOD

EJUCATION
FOR
ALL
EGUCASN
FOR
OLL

Padhna likhna seekho, o mehnat karne waalo,
Padhna likhna seekho, o bhook se marne waalo.

– SAFDAR HASHMI

The Nehru-Mahalanobis model of economic growth depended largely on grandiose public sector enterprises to get the Indian economy going. Nehru even called these companies 'temples of modern India'.

Nevertheless, these temples of modern India created other major problems for the Indian economy. They led to a lack of focus on primary education and the creation of a huge black economy as well as crony capitalism.

In this chapter, we shall deal with the lack of focus on primary education. The public sector enterprises that the Nehru-Mahalanobis model envisaged needed skilled and trained personnel. As Mahalanobis said in a speech he made in November 1954: "In dealing with the programme of industrial production, one of the most important questions would be an adequate supply of trained personnel at all levels. This may indeed prove to be a serious bottleneck."[62]

This speech was made in the presence of Nehru at the Indian Statistical Institute in Calcutta (now Kolkata). With this started the Indian focus on higher education at the cost of primary education. Instead of investing in primary education, India decided to use its education budget to churn out specialised personnel who could execute and manage grandiose public sector projects. This was primarily because of the Mahalanobis model.[63] This led to the country ending up building a few world-class institutions, like the IITs and the IIMs, at the cost of ignoring basic school education for its citizens.

This focus on higher education essentially ensured that primary education was ignored and that Nehru continued where the British had left off. Take a look at Table 3.1, which shows the rate of literacy since 1951.

Table 3.1: Literacy rate over the decades since Independence.

Year	Literacy Rate (in %)		
	Total	Male	Female
1951	18.3	27.2	8.9
1961	28.3	40.4	15.4
1971	34.5	46	22
1981	43.6	56.4	29.8
1991	52.2	64.1	39.3
2001	65.4	75.9	54.2
2011	74.0	82.1	65.5

Source: http://censusindia.gov.in/2011-prov results/data_files/india/Final_PPT_2011_chapter6.pdf.

In 1951, four years after the British had left India, the literacy rate was a mere 18.3 per cent. In the case of women, it was less than 10 per cent. As Jean Drèze and Amartya Sen write in *An Uncertain Glory*:[64]

> The classic problem of school education in India has been underfunding by the state. This was, of course, the case in British India right up to India's Independence (when the British left India, more than four-fifths of Indians had not been touched by schooling), but it was followed by public policies of the newly independent India, which continued gross underfunding despite rousing rhetoric claiming exactly the contrary, with such slogans as 'Education is our first priority'.

Since 1991, an individual aged seven years or more is considered to be literate if he or she can read as well as write with understanding in any language. Hence, all children less than seven years of age are essentially considered illiterate when the rate of literacy is calculated. Before 1991, the literacy rate was calculated by taking the entire population into account. This literacy rate which takes the whole population into account is referred to as the crude literacy rate. Take a look at Table 3.2, which shows the crude literacy rate of India since 1901.

Table 3.2: Crude literacy rate over the past century.

Census Year	Crude Literacy Rate (in %)		
	Total	Males	Females
1901	5.4	9.8	0.6
1911	5.9	10.6	1.1
1921	7.2	12.2	1.8
1931	9.5	15.6	2.9
1941	16.1	24.9	7.3
1951	16.7	25	7.9
1961	24	34.4	13
1971	29.5	39.5	18.7
1981	36.2	46.9	24.8
1991	42.8	52.7	32.2
2001	54.5	63.2	45.2
2011	64.3	71.2	57

Source: http://censusindia.gov.in/2011-prov-results/data_files/india/Final_PPT_2011_chapter6.pdf.

The table clearly shows the abysmal state that Indian education was in during the British Raj. While the British might have established a few big universities, that was primarily to produce enough English-speaking *babus* who could help them govern and plunder India.

Another factor that comes out very clearly from the table is that India's crude literacy rate has improved since Independence. The crude literacy rate as per the 2011 census was 64.3 per cent. The literacy rate (or what is also known as the effective literacy rate) was 74 per cent.

While this sounds impressive, it clearly is not. For one, even close to seven decades after Independence, more than one-fourth of Indians continue to be illiterate. In the case of women, more than one-third of women still continue to be illiterate. And this can't possibly be a good thing.

Furthermore, the effective literacy rate and the crude literacy rate do not take into account the number of years an individual spends in school. The Human Development Report (2015) points out that an average Indian spends 5.4 years in school. While an Indian woman spends 3.6 years in school, an Indian man spends 7.2 years in school, on an average.

The 12th Five-Year Plan (2012-2017), which is a slightly older

document, puts the mean number of years of schooling in India at 5.12 years, which is not very far off from the Human Development Report figure. This is well below other emerging-market countries, like China, at 8.17 years, and Brazil, at 7.54 years. In fact, it is also well below the average of all developing countries, which is at 7.09 years.

There are multiple reasons for this. This is a big issue and can be dealt with in detail only in a focused book on the issue. Nevertheless, here are some of the reasons.

****

The availability of teachers is a huge issue when it comes to imparting primary education. In fact, the Public Report on Basic Education (PROBE) in India released in 1999 summarised the situation of primary education in India very well.[65] The study was carried out primarily in Northern India, in the states of Bihar, Uttar Pradesh, Madhya Pradesh, Rajasthan and Himachal Pradesh.

One of the main findings of PROBE was that: "Many teachers indulge in various degrees of sustained absenteeism. In two-teacher schools, for instance, it is not uncommon for teachers to take turns in attending. And in one-third of all the schools covered by the PROBE survey, the headmaster was absent at the time of the investigators' visit."[66]

The average government school, it was found, remains closed for 12 weeks during a year on account of annual vacations. After accounting for Sundays and Saturdays (when most of the schools have a half-day), the school remains open for around 220 days in a year.

So does that mean that students are taught for 220 days in a year? Not really. Twenty days have to be deducted for the leave that teachers are permitted to take. Another 20 days are to be deducted for the closure of school during heavy rains.

After accounting for this, around 180 days remain. So does that mean that students are taught for 180 days in a year, i.e., at least for half a year? Again, not really. Another 12 days have to be deducted for non-teaching duties, like census-related assignments and election duty. About nine days a year have to be deducted for the collection of salary, and a further nine days for the distribution of incentives like food rations and free textbooks.

So we are down to 150 days, without taking into account strikes, other administrative tasks and days on which teachers cannot attend school because they have a training programme to attend. We also haven't got around to taking the casual absenteeism of teachers into account as well.

The teacher is supposed to teach for six hours every day. But coming late and leaving early seems to be the norm. In fact, in many cases, the school simply does not reconvene after the lunch break.

This basically means that on most days, an average teacher spends around four hours in school on an average working day. Also, PROBE found that half of the teachers do not carry out any teaching activity even when they are in school. This basically means that the average teaching at school is limited to two hours a day for 150 days in a year.

This basically means around 300 hours of teaching in a year, which means less than one hour a day (actually 49.3 minutes, to be very precise).[iv] And we have made a very important assumption here —that the student is present in school on all days that the teacher is— which, of course, is not true.

As Drèze and Sen write in *An Uncertain Glory*:

> With a teacher absenteeism rate of around 20 per cent, and a pupil absenteeism rate of about 33 per cent, the combined probability of a child *and* [emphasis original] his or her teacher being present on an average day is only just above 50 per cent. This brings down the number of teaching days effectively to one hundred days or so.

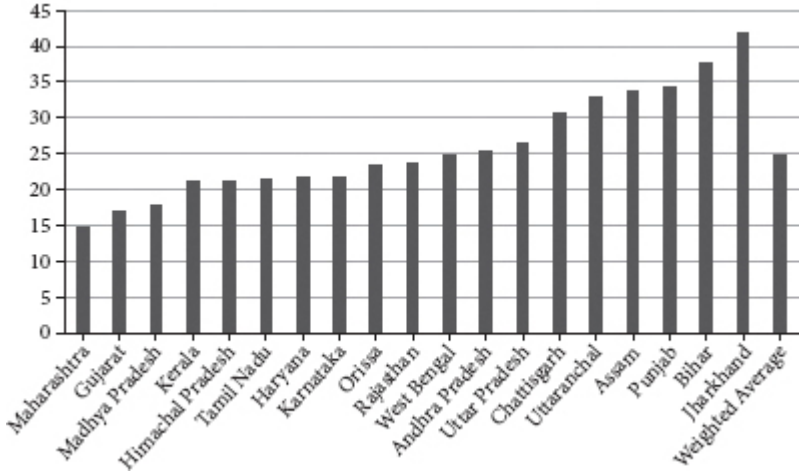
The research carried out by PROBE was published in 1999. It has been some years since then. The question to ask here is: How have things evolved since then? In 2004, a study titled *Teacher Absence in India: A Snapshot* was published by the World Bank.

The findings of this study were along similar lines of the PROBE study. In a typical government-run primary school, one in four teachers was absent on a daily basis. Furthermore, only 45 per cent of the teachers were engaged in teaching even when they were in class.[67]

As the study further points out:[68]

> Within India, the absence rate ranged from 15 per cent in Maharashtra to 42 per cent in Jharkhand [as can be seen from Figure 3.1]. Absence rates are generally higher in low-income states: doubling per capita income is associated with a 7.2 percentage point lower predicted absence. The rates of teaching activity among the teachers who are present are lower in higher-absence states and schools. In some states, only 20 to 25 per cent of the teachers were engaged in teaching at the time of the visit.

Figure 3.1: State-wise comparison of teacher absence in public schools (in %).



Source: *Teacher Absence in India: A Snapshot*, World Bank.

The study also found that: "Absence rates are considerably higher than could be accounted for by non-official teaching duties, such as staffing polling stations during elections or conducting immunisation campaigns, which are sometimes cited as important causes of absence. Based on the responses of each school's head teacher or primary respondent, official non-teaching duties account for only about 4 per cent of [the] total absences."

How do things look more recently? In 2011, a study titled 'Inside Primary Schools—A Study of Teaching and Learning in Rural India' was published by the Annual Status of Education Report (ASER) Centre. The study was carried out in five states—Andhra Pradesh, Assam, Himachal Pradesh, Jharkhand and Rajasthan. Researchers in this study made three visits to schools. They found that, on an average across three visits, 78 per cent of all teachers were marked present. This basically meant that 22 per cent were absent. Also, it needs to be pointed out here that teacher attendance improved across all states except Jharkhand between visit 1 and visit 3.[69]

The World Bank study published in 2004 had found 24.8 per cent of the teachers to be absent. Given this, there hasn't been any significant improvement in teacher absenteeism. In fact, surveys indicate that teacher absenteeism still varies anywhere between 15-25 per cent.[70]

Along with teacher absenteeism, the absenteeism of students continues to remain a real problem. The ASER study cited above sampled around 900 schools and found that only 65 per cent of students in Classes I-V were in school during any given visit carried out by the researchers. This meant that 35 per cent of the students were absent. This finding is in line with the 33 per cent student absenteeism rate cited by Drèze and Sen in *An Uncertain Glory*.

Furthermore, there are multiple reasons for student absenteeism. First and foremost, students are absent because teachers are absent. As the World Bank study found out: "A 10 per cent increase in teacher absence is associated with a 1.8 per cent lower student attendance."[71]

The lack of a school at a reasonable distance from the home plays a part in how regular a student is when it comes to going to school. Furthermore, in the PROBE study, many parents offered illness as a reason as to why their child or children skipped school. This referred to either the student being ill or someone within the family being ill. If the father is ill, the son may have to help in the field. If the mother is ill, the daughter may have to take care of the home.[72]

In fact, a more recent study carried out by ASER in 2014 shows similar results. On the day that the researchers from ASER visited the sample schools, 71.4 per cent of the students in primary schools were present. Furthermore, 71.1 per cent of the students enrolled in upper primary schools were present. In 2013, these figures had respectively been 70.7 per cent and 71.8 per cent.[73]

In fact, like in the case with every average figure, the attendance varies dramatically across the country. In states like Bihar, Jharkhand, Madhya Pradesh, Uttar Pradesh and West Bengal, the attendance was low and in the 50-60 per cent range. In other states like Andhra Pradesh, Gujarat, Himachal Pradesh, Karnataka, Kerala, Maharashtra, Punjab and Tamil Nadu, the attendance levels were higher and in the range of 80-90 per cent.[74]

And how did things look as far as the attendance of teachers was concerned? For primary schools, in 2014, 85 per cent of the appointed teachers were present in school on the day of the visit, as compared to 89.1 per cent in 2009. The 2014 figure for teacher attendance in upper primary schools was 85.8 per cent, as against 88.6 per cent in 2009.[75]

A student's attendance, or rather, the lack of it, has a direct impact

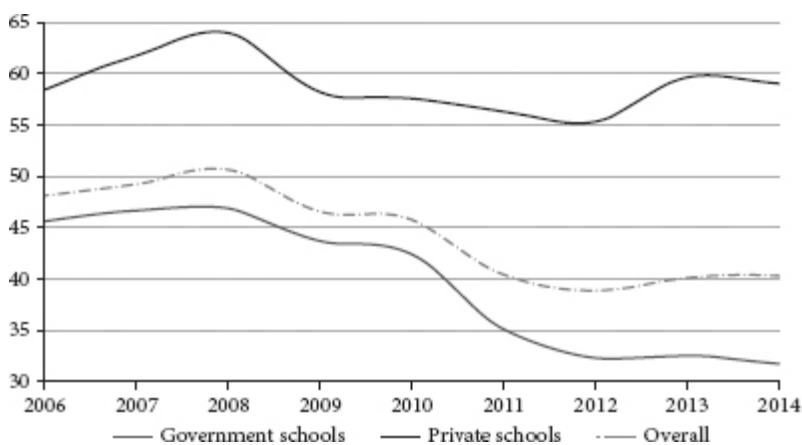
on how much the student learns. The ASER 2011 study found that the children who were present in school more often than not did better than those who weren't.[76]

In fact, another factor that matters is how interested the student is in attending school. But, given the poor standard of teaching, this interest cannot really be high. As Drèze and Sen write: "The quality of teaching in Indian schools seems to be exceptionally low over a wide range of institutions. Teaching methods are quite often dominated by mindless rote learning."[77]

This, clearly, has an impact on the learning of the students. In fact, the reading abilities and the ability to do simple mathematics of Indian students have been falling over the years. This is clearly brought out by the Annual Status of Education Reports published by the ASER Centre. In fact, such evidence has now been available for almost a decade. It is clear that in rural India, the reading ability of students as well as the ability to do simple mathematics have come down over the years.

In 2006, 48.1 per cent of the students studying in Standard III could read at least a Standard I level text. This had dropped to 40.3 per cent by 2014. In 2012, it had dropped to a low of 38.8 per cent. Furthermore, the numbers get even more interesting if we look at the government schools and the private schools separately. Take a look at Figure 3.2.

Figure 3.2: Percentage of children in Std. III who can read at least a Std. I level text (by school type).



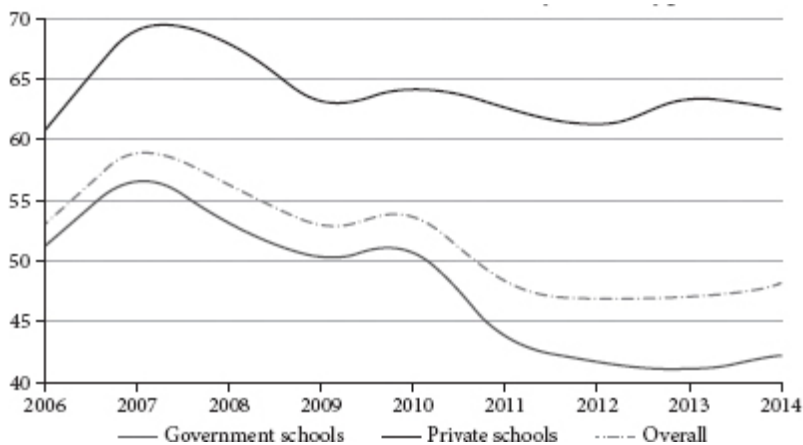
Source: *Trends over Time (2006-2014): A Supplement to ASER 2014*, January 2015.

When it comes to government schools, the percentage of Standard

III students who can read at least Standard I text has come down dramatically over the years. In 2006, it was at 45.8 per cent. Since then, it has fallen to 31.8 per cent. In the case of private schools, the figure has more or less remained stagnant.

And this is a trend that remains constant across different learning outcomes (see Figure 3.3).

Figure 3.3: Percentage of children in Std. V who can read at least a Std. III level text (by school type).

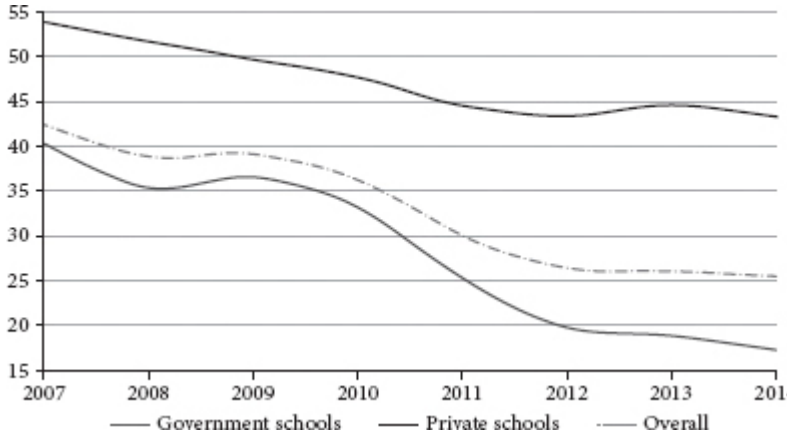


Source: *Trends over Time (2006-2014): A Supplement to ASER 2014*, January 2015.

The overall reading ability has come down over the years, and it has come down dramatically in government schools. A similar trend is observed when the basic numeracy abilities of children were measured. In fact, things have gone pretty bad when it comes to the ability of students to do basic mathematics (see Figures 3.4(a) and 3.4(b)).

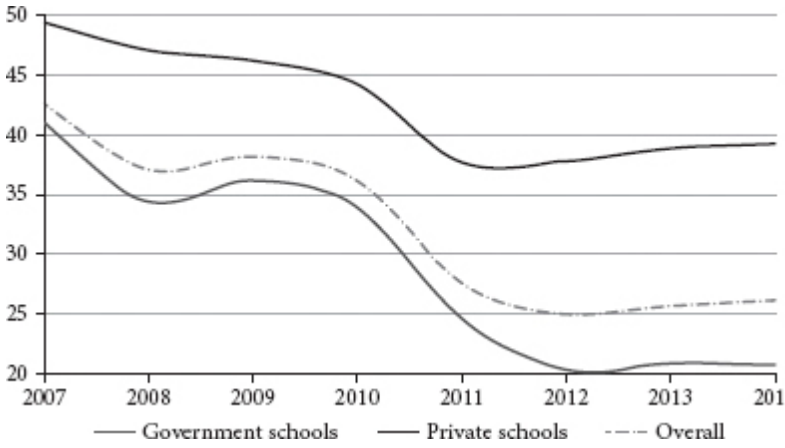
The mathematical abilities of students have fallen quite drastically over the years. In 2007, 42.4 per cent of Standard III children could do subtraction. By 2014, the number had fallen to 25.4 per cent. In 2007, 42.5 per cent of Standard V students could do division. By 2014, the number had fallen to 26.1 per cent. The figures in government schools were even worse.

Figure 3.4(a): Percentage of children in Std. III who can do at least subtraction.



Source: *Trends over Time (2006-2014)*: *A Supplement to ASER 2014*, January 2015.

Figure 3.4(b): Percentage of children in Std. V who can do division.



Source: *Trends over Time (2006-2014)*: *A Supplement to ASER 2014*, January 2015.

Furthermore, these are average, all-India numbers. There are some states where the numbers are absolutely abysmal. Take the case of Jharkhand. Only 12.1 per cent of Standard III students in government schools could do at least subtraction in 2014, against the national average of 17.3 per cent. Only 17.6 per cent of Standard V students could do division, against the national average of 20.7 per cent in government schools.[78]

This abysmal state of Indian education was visible to all when India participated in the Programme for International Student Assessment (PISA), carried out by the Organisation of Economic Cooperation and Development, held in 2009. In this test, the country finished second last, above only Kyrgyzstan. This was the first and last time that India participated in PISA.

To cut a long story short, the state of primary education in India is in a huge mess. It all started with the government paying attention to higher education in the quest to produce manpower for the public sector enterprises. While they did manage to produce manpower for the public sector enterprises, primary education got grossly neglected in the process.

The irony is that school enrolment is at an all-time high. As per the Annual Status of Education Report (2014), the percentage of students out of school in the age group of 6 to fourteen is at 3.3 per cent. The number was the same in 2013. Education statistics released by the Ministry of Human Resource Development in 2014 put the enrolment ratio in primary school (Standards I to V) in India at 99 per cent. The enrolment ratio in upper primary school (Standards VI to VIII) is at 93 per cent. This falls dramatically to 73.6 per cent in secondary school (Standards IX and X) and 48.1 per cent in senior secondary school (Standards XI and XII).

Furthermore, the facilities available at rural schools have also marginally improved. Around three-fourths of the schools had access to drinking water in 2014, up from 72.7 per cent in 2010. In fact, in states like Bihar, Gujarat, Himachal Pradesh and Uttar Pradesh, drinking water was available in more than 85 per cent of the schools.[79]

Also, 65.2 per cent of the rural schools had usable toilets in 2014, up from 47.2 per cent in 2010. The percentage of schools that had usable girls' toilets was at 55.7 per cent in 2014, up from 32.9 per cent in 2010. 78.1 per cent of the schools had library books in 2014, up from 62.6 per cent in 2010. As far as computers go, 19.6 per cent of the rural schools had computers in 2014, against 15.8 per cent in 2010. Kerala led in this parameter, with 89.8 per cent of the schools having computers. The corresponding figures for Gujarat, Tamil Nadu and Maharashtra were at 81.3 per cent, 62.4 per cent and 46.3 per cent, respectively.[80]

The point being that things are looking much better for rural schools on the facilities front than was the case in the past.

One reason often offered for the bad state of Indian school education is that teachers aren't paid well. This isn't really true. The teacher salaries in OECD (Organisation for Economic Cooperation and Development) countries, which include some of the most developed

countries in the world, were around 1.2 times the GDP per capita between 2000 and 2009. In India, the ratio of teacher salary to GDP per capita was around five before the Sixth Pay Commission came into effect.[81]

And this ratio shot up even further after the Sixth Pay Commission came into effect in 2009, with retrospective effect from 2006. Every ten years, the central government sets up a Pay Commission which, among other things, also revises the salaries of central government employees upwards.

This has an impact on the salaries of those working for the state governments as well. The state governments are forced to raise salaries by implementing the recommendations of the Central Pay Commission with some modifications.

As the Seventh Pay Commission Report, released in November 2015, points out in relation to the Sixth Pay Commission: "A significant number of States follow the recommendations of the Central Pay Commission. Equally, there is a significant plurality of States that design their own pay awards based on the recommendations of their own State Pay Commissions, which of course do consider the recommendations of the Central Pay Commission."

This essentially means that the salaries of those employed by the state governments, which include teachers in government schools, go up. Take the case of Uttar Pradesh, the most populated state in India. The starting salary of a regular teacher in a government primary school was Rs. 8,370 until December 2008. In early 2009, this increased to Rs. 17,996, a jump of 115 per cent. When it came to experienced teachers, their salary jumped to Rs. 22,955, an increase of 76 per cent. This implied a mean increase of 92 per cent, an almost doubling of salary at a single go.[82]

As mentioned earlier, this increase was retrospective and came into backdated effect from 2006. Hence, the average salary of a primary school teacher in Uttar Pradesh was Rs. 20,476 per month, or Rs. 2,45,712 per year. The UP state GDP per capita during the same year (i.e., 2009) was Rs. 14,834. Hence, the salary of the average teacher was 16.6 times the average per capita income in the state of Uttar Pradesh.[83]

As the Sixth Pay Commission Report had said: "Teachers are critical as

they are an investment for the future of the country. To ensure that the best available talent enters the Government in these fields and continues to feel motivated to give their best after joining, the Commission has consciously recommended higher entry-level pay scales for constables, teachers and nurses."

What the Pay Commission did not take into account was where the money for higher salaries was going to come from. Many states got around this by recruiting more contract teachers at a fraction of the cost they would have had to pay if they had recruited permanent teachers.

Before the Sixth Pay Commission recommendations had come into force, the teachers in private schools in Uttar Pradesh made around Rs. 3,000 per month, or around one-fourth of what the government school teachers were making. All across India, the ratio was around 3:1, i.e., government school teachers earned three times as much as private school teachers.[84]

This ratio got worse after the Sixth Pay Commission recommendations came into effect. The starting salary of a regular government primary school teacher jumped to Rs. 17,996, whereas the salary of a primary school teacher of a private school increased to around only Rs. 3,500 per month, implying a ratio of more than 5:1.[85]

The contract teachers work on lower salaries than the regular government teachers. At the same time, they have less training and lower formal qualifications. Nevertheless, there is some evidence that suggests that they do no worse than regular teachers in imparting basic skills like reading and writing.[86]

The point is that paying government school teachers higher than their private counterparts and higher than the average Indian citizen hasn't led to any improvement in the quality of teaching. In fact, it costs the government a lot of money, which one estimate puts at Rs. 50,000 crore, or 0.6 per cent of the GDP, per year. The cost per student in a government school in the median[v] state in 2011-2012 was Rs. 14,615. In a private school, the median cost was Rs. 5,961. This is equivalent to a median difference of Rs. 7,906 per student.[87]

As Lant Pritchett and Yamini Aiyar write in their 2014 research paper titled 'Value Subtraction in Public Sector Production: Accounting Versus Economic Cost of Primary Schooling in India':[88]

> Hence in the typical Indian state, educating a student in a government school

> costs more than twice as much than in a private school, a gap of Rs. 7,906. Just these accounting cost gaps, aggregated state by state, suggest an annual excess of public over private cost of children enrolled in government schools of Rs. 50,000 crores, or 0.6 per cent of the GDP. But... that staggering estimate does not account for the observed learning differentials between [the] public and [the] private [schools].

As we have seen earlier in the chapter, the learning outcomes in government schools have fallen dramatically over the years, while those in private schools have kind of remained stagnant in the case of language skills but have fallen in the case of the ability to do basic mathematics. Nevertheless, the latter haven't fallen as fast as they have fallen in government schools.

The government school teachers are making much more money than they were in the past. Having said this, the teachers seem to have missed out on the bonanza when it comes to the recommendations of the Seventh Pay Commission.

As the Seventh Pay Commission report points out: "The Commission notes that the teachers were provided higher than normal replacement pay grades, in the form of an upgrade, by the Sixth Central Pay Commission. This has given rise to relativity issues *vis-à-vis* other cadres. Therefore, considering the job profile, entry-level qualifications and method of recruitment, any further upgradation in pay scales is not justified."

The question still remains as to why the overall quality of education has particularly fallen since 2010. The answer lies in the Right to Education Act, which was passed by Parliament in August 2009 and which came into force from April 1, 2010.

****

Perfect is the enemy of good.

– OLD ENGLISH APHORISM

Economists often talk about the Law of Unintended Consequences. Typically, the way a government works when it encounters a major problem is to pass a law around it. But the law normally doesn't have the impact it is expected to have and, more often than not, ends up having effects which were not expected in the first place.

Simply stated, the Law of Unintended Consequences refers to a situation wherein government decisions have unexpected effects. Here

is an example. As Kaushik Basu writes in *An Economist in the Real World*:[89]

> To ensure that all rural people get good education, West Bengal made it compulsory for all teachers, including the best, to serve a term in rural areas. The biggest difference this made was [that] it changed the catchment areas of 'best' teachers, since many talented people preferred not to become teachers or, if they were already teachers, they preferred to move out to other places, where they would not be rotated; and this was an important factor in the decline of Kolkata as the leading hub of higher education.

Hence, the West Bengal government's decision ended up having the opposite impact that it was expected to have. Something like that seems to be happening because of the Right of Children to Free and Compulsory Education Act as well. The Act is referred to as the Right to Education (RTE) Act in short.

The Act was passed on August 4, 2009, and made free and compulsory elementary education a fundamental right for children between the ages of six and 14 in a neighbourhood school till the completion of elementary education. Elementary education was defined as education from Standard I to Standard VIII. The Act came into effect from April 1, 2010.

The hope was that many years of wrong would be set right with the RTE. But, as we shall see, nothing of that sort has happened.

The Constitution had envisaged the Right to Education as a Directive Principle of State Policy, which the state should strive to achieve. As it stated: "The State shall endeavour to provide, within a period of ten years from the commencement of this Constitution, for free and compulsory education to all children until they complete the age of 14 years."

The 86th amendment to the Constitution, made in December 2002, inserted Article 21A, which basically stated: "The State shall provide free and compulsory education to all children of the age of six to fourteen years in such manner as the State may, by law, determine."

The 86th amendment was followed by discussions which ultimately led to the RTE Bill, which was passed by the Rajya Sabha in December 2008. The Lok Sabha passed the Bill on August 4, 2009, and it received Presidential assent on August 26, 2009.

With this, India became the 135th country in the world to make the Right to Education a fundamental right. The legal basis comes from Article 26(1) of the Universal Declaration of Human Rights,

which essentially states: “Everyone has the right to education. Education shall be free, at least in the elementary and fundamental stages. Elementary education shall be compulsory.”

Here are some of the important points of the RTE Act:

1) Every child between six and fourteen has the right to free and compulsory education in a neighbourhood school. If there is no school in a particular neighbourhood or area, the RTE Act calls for its establishment within a period of three years of the commencement of the Act by the appropriate government and local authority.

2) If a child above six years of age hasn’t started school, then the RTE Act states that he should be admitted to a class which is appropriate for his age. The Act also states that the child should be given special training so that he is brought on par with others in the class within a certain time frame.

3) The RTE Act clearly specifies that the teacher should complete the entire curriculum (i.e., the syllabus) within the specified time.

4) The Act also makes it very clear that no child should be held back in class or expelled from school until he has completed his elementary education. This basically means that there are to be no exams and students keep moving from one class to another, irrespective of whether they are good enough for the next class or not. The Act also makes it clear that no child should be required to pass any board exam until the completion of elementary education, and no child should be subject to physical or mental harassment.

In fact, there is another interesting sub-clause in the Act. Section 29(2h) calls for “comprehensive and continuous evaluation of [the] child’s understanding of knowledge and his or her ability to apply the same”.

5) The Act also specifies the teacher-to-student ratio. For Standards I to V, having up to 150 students, a ratio of one teacher per thirty students is specified. If the school has more than 200 students, then the ratio should be more than one teacher per forty students. For Standards VI to VIII, a ratio of at least one teacher per thirty-five students has been specified.

6) The Act also clearly specifies the kind of infrastructure a school should have. These include separate toilets for boys and girls, safe and adequate drinking water facilities, and a kitchen where a mid-day meal can be cooked. The school is also expected to have a playground. The school building is expected to be secured by a boundary wall or fencing.

The schools also need to have a library, which provides newspapers, magazines and books, including storybooks. Play material, games and sports equipment need to be provided for each class, as required.

If these conditions are not met, then the government shall withdraw its recognition to the private school. The order withdrawing recognition needs to clearly specify in which neighbourhood school the children studying in the school from which the recognition has been withdrawn are to be admitted.

If the school from which recognition has been withdrawn continues to operate, it shall have to pay a fine of Rs. 10,000 per day.

7) The Act calls for the establishment of a School Management Committee (SMC) consisting of elected representatives of the local authority, parents or guardians of the children studying in the school, as well as teachers. Furthermore, at least threefourths of the members of the SMC are to be parents and guardians. Also, women need to make up half the SMC.

8) The Act also talks about the local government making the necessary arrangements to provide free pre-school education for children above the age of three in order to prepare them for elementary education from the age of six onwards.

9) The Act prescribes that teachers cannot carry out any private tuition activity. It also specifies a minimum number of working days for schools. Standards I to V need to operate for a minimum of 200 days during the course of a year. Standards VI to VIII need to operate for a minimum of 220 days during a year. Furthermore, Standards I to V need to be taught eight hundred hours per year. Standards VI to VIII need to be taught for one thousand hours per year.

10) The Act requires government-aided schools to provide free and compulsory education to a minimum of 25 per cent of their intake to children belonging to the weaker sections of society. Also, Kendriya Vidyalayas, Navodaya Vidyalayas, Sainik Schools and private schools are required to admit 25 per cent of their intake in Standard I from among children belonging to the weaker and disadvantaged groups in the neighbourhood and provide them with free and compulsory elementary education until its completion.

These were the salient features of the RTE Act. As can be seen from the Act, it is very input driven. It expects schools to have a certain infrastructure and teachers to teach a certain number of hours and complete the syllabus. It also expects schools to set up an SMC with parents or guardians forming a majority. It expects the government to provide pre-schooling facilities as well in order to get the students ready for elementary education.

The Act also specified a ratio of one teacher per thirty students. This comes from the belief that smaller class sizes lead to better learning. I put this question to the Nobel Prize-winning economist James Heckman, who has done extensive work in this area, a few years ago. And this is what he had to say:

> The younger the child, the smaller the class size should be. So when you get to these very young pre-schools, it seems like a ratio of three children per one teacher is about the right size. I am talking about kids one year of age, who are very demanding, so you really can't supervise them. However, when you get to the higher levels of education, class sizes can grow, and there the evidence on class size is a little bit weaker. Schools in the north-east of Brazil did not even have a roof over their heads. … They had no text-books. So spending more money on those schools turned out to be a very good thing. They had a huge number of students and a very small number of teachers. So, smaller classes and more resources played a huge role in increasing the Brazilian quality of schooling. But if you were to move that discussion to Sao Paulo – just go south into a more urban area – then large classrooms *per se* were not the problem, even resources *per se* weren't the problem. It was typically what happened to the kids when they walked into the classroom, from the aspect of student discipline and so on, which was the problem. So I think that the focus in the past has been on the class size and that may have been overstated.

The trouble with the RTE, as stated above, is that there are no learning outcomes that have been specified. The economist Abhijit Banerjee explained this beautifully in a talk at a literature festival in November 2012, where I happened to be present.

As he said: "We did one experiment in Bihar which was with government school teachers…. The teachers were told: 'Instead of

teaching as you usually teach, your job for the next six weeks is to get the children to learn some basic skills. If they can't read, teach them to read. If they can't do math[s], teach them to do math[s].' At the end of six weeks, these teachers were given a small stipend. They had also been given a couple of days of training."

And how did the students do? As Banerjee recounted: "At the end of six weeks, the children had closed half the gap between the best performing children and the worst performing children. They had really improved enormously."

So what was happening here? The teachers did not have to complete the syllabus in this case, as the Right to Education mandates. They had to teach students what the students did not know.

As Banerjee put it:

> The reason was that they were asked to do a job that actually made sense. They were asked to teach the children what they didn't know. The usual jobs teachers are asked to do is to teach the syllabus – which is very different. Under the Right to Education Act, every year you are supposed to cover the syllabus. It doesn't matter whether the children understand anything. Think of all the Standard IV children who can't read. They are learning Social Studies and all kinds of other wonderful things – except [that] they can't read. They are learning nothing. They are sitting in a class watching some movie in some foreign language without subtitles. Hence, the drop-out rates are high. And I am shocked why anybody comes to school at all.

Central planning and Big Government essentially try to implement what they think is the best outcome. But that is easier mandated by the law than implemented in reality. Instead of concentrating on just inputs when it comes to the RTE, we should also be concentrating on learning outcomes.

As Banerjee said:

> The problem of education has a perfectly good solution. In the first four years, we should prioritise the learning of basic skills – forget about learning the history of the country, etc. You don't have to know who Gandhiji was for the first four years. Let's just concentrate on students being able to read and do simple maths. I think that such a system would deliver a much better outcome. One thing we forget is that 'perfect is the enemy of good'. We are trying to have an education system that is perfect and in which every child would come out with wisdom at the end of it. As a result, they learn nothing.

The question is: Why is this happening? The lack of regular attendance, both of teachers as well as students, has its impact. Furthermore, the focus is on finishing the syllabus. Given this, the teachers concentrate on that and not on how much learning is taking

place. In the process, they end up addressing the needs of a small portion of the class which follows what is being taught and leave out the rest.[90]

What does not help is the fact that the RTE makes it very clear that no child should be held back or expelled until the completion of elementary education. Hence, there are no exams. This basically means that the entire class keeps getting promoted, but most of them don't learn the things that they should.

Till the RTE came along, the Indian education system was very examination focused. In fact, it still is. During the summer months, when results to different competitive exams as well as board exams come out, news about a spate of suicides hits the media.

Hence, the idea, supposedly, was to bring down the anxiety of students regarding exams. Another reason was that exams and detention force the students to drop out of the education system quickly. The trouble with this argument is that ultimately, at some point of time, students will have to write exams. And what will they do about it then?[91]

As the data from the ASER Report of 2014, highlighted earlier in the chapter, clearly points out, the learning outcomes, especially in government schools, have gone down dramatically since the RTE came into place.

As Madhav Chavan, the CEO-President of the Pratham Education Foundation writes in the ASER Report of 2014:

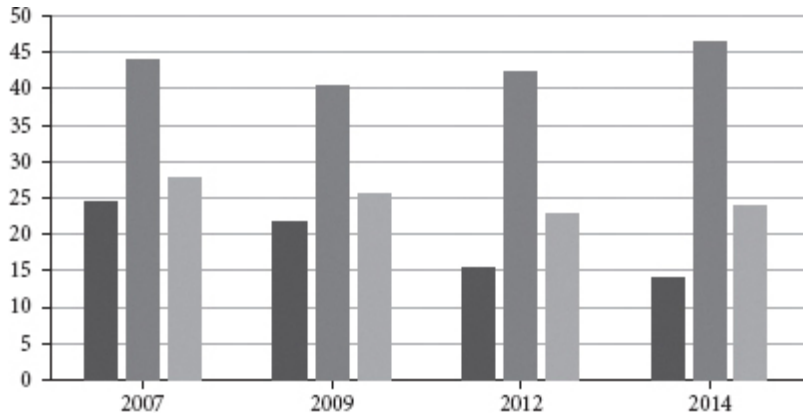
> Just when it seemed like the ASER results were getting repetitive, the Right to Education Act was passed (in 2009) and suddenly things began to change. In ASER 2010, we first noticed that the proportion of children in private schools was growing and learning levels had begun to decline. But the Ministry of Human Resource Development officially neither recognised ASER nor did it accept its findings as far as learning levels were concerned.

One theory that has been offered regarding the fall in learning standards is that since students are not held back in a class and everyone moves to the next class, this has led to a relaxation in classroom teaching.[92] Interestingly, in Rajasthan, parents met the Chief Minister Vasundra Raje during her outreach programme and suggested that the ban on exams was not in the best interests of children. A September 2014 newsreport suggested that the state was considering exams in Standards III, V and VIII.[93] Another suggestion that has been made is that while it is fair not to hold back students up

to Class V, yet after that the approach needs to be relooked at.[94]

Ultimately, the problem is that the input-driven approach of the RTE is not translating into basic learning for students. As we have seen earlier in the chapter, their ability to read and do basic maths remains fairly limited. This ability has come down dramatically since 2010, when the RTE became the order of the day. A similar lack of ability is visible among students who go to government school, when it comes to reading simple sentences in English, as can be seen from Figure 3.5.

Figure 3.5: Percentage of children in Std. V who can read simple English sentences.



Source: *Trends over Time (2006-2014): A Supplement to ASER 2014*, January 2015.

As is clear from Figure 3.5, the ability to read simple English sentences has fallen dramatically in government-run schools over the years. This inability of students to read and do basic maths is extremely worrying. As the 12th Five-Year Plan document pointed out:

> The biggest concern in elementary education is the poor level of student learning—both scholastic and co-scholastic/non-cognitive. Evidence suggests that learning outcomes for children in Indian schools are far below corresponding class levels in other countries, and that the learning trajectories for children who remain in school are almost flat. Clearly, the additional time spent by students in school as they move from one class to another is not translating into much improvement in [their] learning levels.

Madhav Chavan, of the Pratham Education Foundation quoted earlier, estimates that in the period of the ten years up to 2015, 10 crore children completed primary school without the ability to do some basic reading and mathematics. And this, as I have repeatedly pointed out throughout this chapter, is primarily because of the input-

driven approach of the RTE.

As Lant Pritchett, a professor at the Harvard Kennedy School of Government, puts it: "The Right to Education legislation doesn't in fact provide the right to education at all. It provides the right to attend a school. Whether that school actually provides an education—that apparently is not how some advocates want the problem framed. They want to define a 'quality' school as one with a set of inputs, and that is that."[95]

****

Typically, governments tend to tackle a problem by allocating more money towards it. In the case of the RTE, the Sarva Shiksha Abhiyan (National Education Mission) was identified as the main vehicle for implementing the provisions of the RTE.

The total allocation to the Sarva Shiksha Abhiyan (SSA) in 2009-2010 (the central government as well as the share of the state governments) was at Rs. 27,552 crore. This was obviously in the pre-RTE days. Once the RTE came into force on April 1, 2010, allocation towards the SSA increased. In 2012-2013, the total allocation was at Rs. 69,982 crore.[96] This dropped to Rs. 56,529 crore in 2014-2015. In 2015-2016, the amount stood at Rs. 63,408 crore.[97]

What this tells us is that allocation to the SSA has gone up by more than 100 per cent since 2009-2010, even though the money allocated has fallen in the recent past. How do the numbers look if we look at the allocation per student? In 2010-2011, the allocation per student (excluding the union territories) had stood at Rs. 3,511. It jumped to Rs. 5,596 in 2012-2013.[98] In 2013-2014, the allocation per student dropped to Rs. 4,044, before jumping up to Rs. 5,330 in 2015-2016. This jump happened partly due to a 2 per cent drop in the school enrolment numbers.[99]

If we take consumer price inflation into account, Rs. 3,511 in 2010-2011 would be worth around Rs. 5,154 in 2015-2016. Hence, the allocation per student has gone up only marginally over the years. Nevertheless, the learning outcomes have fallen.

The assumption was that, with money being allocated towards the SSA, the school infrastructure would improve, and that would lead to improved enrolment in schools. The enrolment levels have improved. The National Sample Survey estimates that, as of September 2014, the

proportion of out-of-school children between the ages of six and 13 was only at 3 per cent. Out-of-school children are essentially children not enrolled in a primary school.

The assumption was that, once enrolments improve, the learning would happen automatically. As Abhijit Banerjee and Esther Duflo write in their book *Poor Economics—Rethinking Poverty and the Ways to End It*:[100]

> Somewhat bizarrely, the issue of learning is not very prominently positioned in international declarations. The Millennium Development Goals do not specify that children should learn anything in school, just that they should complete a basic cycle of education. In the final declaration of the Education for All Summit in Dakar in 2000, sponsored by the United Nations Educational, Scientific and Cultural Organisation (UNESCO), the goal of improving the quality of education is mentioned only in the sixth position—out of six goals. The implicit assumption, presumably, was that learning would follow from enrolment. But, unfortunately, things aren't that simple.

From this, we can safely say that India's RTE basically follows what we can perhaps call the international formula for achieving universal education. But, as Banerjee and Duflo point out, it doesn't work. And they have extensive field experience achieved through carrying out randomised control trials in large parts of the developing world, including India.

As Duflo puts it: "Learning is not about enrolment, teacher-student ratio [or] having latrines in schools; it's about if we are serious about learning."[101] The question is: Are we serious about learning? It turns out that we are not. A basic problem with the RTE remains that—it expects children to be ready for elementary education when they enter Standard I. In fact, as Duflo puts it: "By the end of Grade 1, they are supposed to be done with reading…. It's a complete fantasy."[102]

And why is it a fantasy? The first factor, which I have discussed earlier in this chapter, is the emphasis on the completion of the syllabus during the course of the year. The RTE essentially mandates that children are to be placed in classes according to their age, and not according to their level of learning. As the ASER 2013 report points out: "In a country where more than 60 per cent [of] government schools have multi-grade, multi-level classes and where more than 50 per cent lag at least two years behind, if not more, in terms of basic learning competencies, how is the teacher supposed to 'complete the syllabus'?"[103]

In fact, it is worth emphasising here that when a child joins

Standard I, in most cases, he or she usually comes from a text-scarce environment.[104] But the delivery of education does not seem to take this into account. As the ASER 2013 report points out: "Analyses of different Std. I textbooks across states reveal many underlying assumptions related to content, method and pace. At age 5, children's ability to learn needs to be scaffolded well, but in most states the Std. I curriculum covers a great deal of content very quickly, so that many children get left behind even before they have started."

In the first few years, instead of trying to complete the syllabus it is important that the teachers and the education system teach basic skills to children. This basically means to teach them to read, write and do some basic mathematics. If a student has problems reading, you teach him or her to read. If the student does not recognise numbers, you help him or her with that. And so on. In fact, Banerjee and Duflo have carried out such experiments in different states and seen the learning levels of children improve.[105]

With a no-child-held-back policy, these children keep getting promoted to higher classes. It is important that some sort of exams be re-introduced. One can understand not subjecting students in Standards I and II, and perhaps even in Standard III, to any exam. But not having exams until Standard VIII doesn't make much sense.

As Banerjee put it at the literature festival a few years back:

> The public education [system] is a system for the teachers, by the teachers and in the interests of the teachers. This is a system which essentially does not want any metric of performance. The excuse they give is that we don't want children to be tested because children feel bad if they don't do well. It's true that children feel bad if you tell them in public that they have done badly. But there is no reason that testing has to mean public declaration of results. In Massachusetts [in the United States], where I live, test scores are only revealed at the grade level. So, for example, all fourth graders may have done badly at some school, but I don't have to know if someone did well or badly.

Exams have been replaced by what the RTE calls Comprehensive and Continuous Evaluation (CCE). Banerjee calls it "neither comprehensive nor continuous".

As Vimala Ramachandran, professor at the National University for Educational Planning and Administration, writes:[106]

> Post-RTE mechanisms like Continuous and Comprehensive Evaluation (CCE) have been reduced to a series of formats that teachers are expected to fill out. In one state, I asked the teachers about CCE, and several of them said that they just fill out the forms without actually conducting the activities with children. Administrators admit that they follow instructions from above and that they are

not educators who can develop systems that can monitor children's learning.

Also, CCE in its current form entails the execution of sampled achievement surveys every three years to assess the quality of learning in students. The government, of course, defends it, but CCE "doesn't give reliable information on what children have learned".[107] When the government reaches the stage when it ends up defending a faulty system, the country as a whole loses out in the process.

There is a thing or two we can learn here from the No Child Left Behind Act of the United States, which was passed in 2002. The Act mandates that students be tested for mathematics and reading every year between Standards III and VIII. It further mandates that students be tested for science once between Standards III and V and once between Standards VI and VIII.[108]

This, along with focusing on learning outcomes, sounds like a perfectly reasonable thing to do instead of trying to finish the syllabus. The question is: Will the government come around to doing this? It doesn't look like that because no government likes to be told that it has been wrong all along.[vi]

Furthermore, this is also likely to bring down the huge number of students dropping out from pursuing education. Table 3.3 shows the drop-out rates at various levels of school education in India.

Table 3.3: Category-wise drop-out rates of children studying up to secondary school (in %).

Level	Overall			Scheduled Castes			Scheduled Tribes		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
I-V	21.2	18.3	19.8	17.7	15.4	16.6	31.9	30.7	31.3
I-VIII	39.2	32.9	36.3	42.4	34.4	38.8	49.8	46.4	48.2
I-X	48.1	46.7	47.4	51.8	48	50.1	63.2	61.4	62.4

Source: Educational Statistics, Ministry of Human Resource Development, 2014.

It is worthwhile noting that boys consistently drop out more often than girls across all categories and class levels. Also, with the exception of the children from scheduled caste families studying in Standards I to V, the drop-out rates for children from the scheduled castes and scheduled tribes are higher than the average drop-out rates for all three class levels.

In general, the drop-out rates are extremely high. On the whole, in primary school, one out of every five students drops out. The

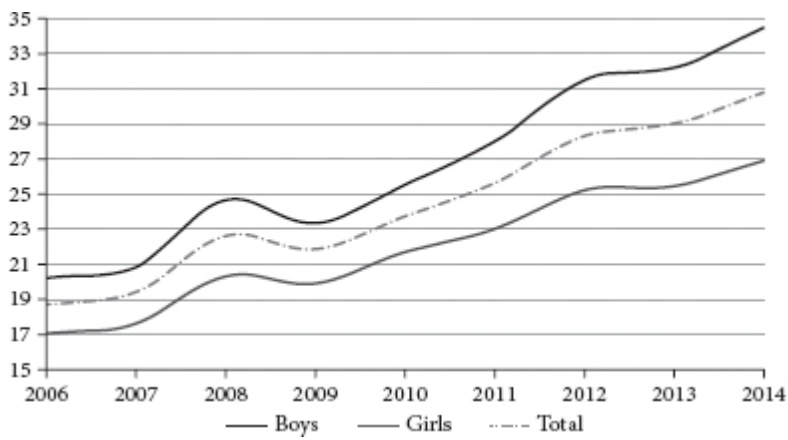
proportion increases as the students move to higher classes. For Standards I to X, i.e., the complete secondary education cycle, nearly half of the students drop out (47.4 per cent, to be very precise). This is a clear reflection of the quality of the Indian education system.

Nevertheless, there are other factors at work as well. As children enter their teens, there is great pressure on them to earn a living. The education system as it is currently structured doesn't take this factor into account. What is really needed is the integration of vocational training which focuses on individual and practical skill development alongside regular education.[109]

****

One impact of the RTE has been that the proportion of students going to private schools has gone up dramatically over the years, as is clear from Figure 3.6.

Figure 3.6: Gender-wise percentage of children in the age group of 6-14 years enrolled in private schools.



Source: *Trends over Time (2006-2014): A Supplement to ASER 2014*, January 2015.

In 2010, 23.7 per cent of the students were in private schools. By 2014, the number had jumped to 30.8 per cent. In fact, 2015 data from Punjab shows that 50 per cent of the students in the age group of six to 14 study in private schools. Around 48.5 per cent study in government schools. Hence, the number of students studying in private schools in Punjab is greater than those in government schools. Around 1.5 per cent still don't go to school.[110]

In fact, if we look at the students studying in Standards I to V, around 54 per cent study in private schools.[111] Even Haryana and

Uttar Pradesh have greater than 50 per cent of their school student population enrolled in private schools.[112] This is primarily because the quality of learning in government schools is low.

At the same time, the performance levels of the private schools haven't improved either. Nevertheless, they haven't fallen, as has been the case with the government schools. This, perhaps, explains why parents prefer to educate their children in private schools.

Interestingly, the proportion of students in private schools has been going up, despite many schools having shut down because they didn't fulfil the conditions laid down by the RTE. These include conditions like schools needing to have a playground and a boundary wall.

It is important to understand here that most private schools in India operate at the lower end of the spectrum and charge very low fees. Of the 3.3 lakh private schools in India which do not get any aid from the government, only around 16,000 schools are affiliated to boards like the Central Board of Secondary Education and the Indian Council of Secondary Education. The schools affiliated to these boards are the ones which charge high fees.[113]

As per the National Sample Survey (2014), the median school fee was Rs. 300 per month in rural India. The median fee in schools in urban areas was Rs. 416 per month. This of course includes both high- as well as low-fee-charging schools. Given that these are all-India figures, the actual figures across states vary. For Uttar Pradesh, the figures were at Rs. 117 and Rs. 250 per month for rural and urban areas, respectively.[114]

At these fee levels, it is difficult for many schools to meet the expenditure required to satisfy the conditions set by the RTE Act. As Jagdish Bhagwati and Arvind Panagariya write in *India's Tryst with Destiny— Debunking Myths that Undermine Progress and Address New Challenges*: "At the fee[s] they charge, schools will not be able to meet these norms and standards. At the same time, poor families whom they serve cannot pay significantly higher fees."

This has led to the closure of schools all over the country. As the economist Geeta Gandhi Kingdon wrote in *The Hindu* in February 2016: "By March 2014, about 4,355 private schools had been closed down, and another 15,083 had received notices to close down." This impacted around 39 lakh children.[115] There are other estimates which

suggest that a higher number of schools have shut down since the RTE came into existence in April 2010. A May 2016 newsreport points out that nearly 75 per cent of the private schools in Madhya Pradesh are under threat because they do not meet the norms set by the RTE Act. The report quoted an unnamed official as saying: "If recognitions of schools are cancelled, then 75-80 per cent of private schools in the state will be closed."[116]

Similar numbers come out from other states as well. Another newsreport suggests that the Chhattisgarh government sent out an order closing 2,918 schools in mid-June 2015.[117] Data from the National Independent Schools Alliance (NISA) suggests that, in 2015-2016, 6,043 schools in nine states faced closure threats. The NISA data also shows that 7,796 schools in Maharashtra, Punjab and Uttar Pradesh received closure notices. Of these, 7,000 schools were in Maharashtra and 746 were in Punjab. The remaining were in Uttar Pradesh. As many as 998 schools were shut down in Madhya Pradesh during the same period. In 2014, 3,157 schools were shut down in the five states of Andhra Pradesh, Delhi, Haryana, Punjab and Tamil Nadu.[118]

In fact, NISA suggests that government functionaries often make unofficial statements in the media announcing plans to shut down schools which do not follow the RTE. This is not followed by legal notices being served to those schools. But what it manages to do is create a panic among parents, who start to worry whether or not the school their children go to will continue to exist.[119] This is another version of the 'inspector and licence raj' that has impacted much of India's economy over the years.

This is something that Bhagwati and Panagariya talk about in their book. As they write: "Alternatively, it [i.e., the RTE Act] will create a large-scale 'inspector raj' in elementary education, whereby government inspectors will falsely certify that the school meets the prescribed norms and standards in exchange for an appropriate bribe."

There is nothing that stops education officials from first creating the fear of closure among private schools and then demanding a bribe. The irony is that Section 18 of the RTE Act exempts government schools and government-aided schools from having to meet the physical infrastructure norms.

This kind of closure is clearly not a good trend, for the simple

reason that a significant proportion of students do study in private schools. Furthermore, the financially stretched government is really not in a position to take on these students as well. It is worth pointing out here that the per-pupil cost in government schools is up to 20 times higher than that of low-fee-charging private schools.[120]

This is the trouble with the input-driven approach that the government follows while implementing the RTE, which is clearly not working. The government should also look at the learning achievements of students studying in private schools rather than totally concentrating on just the physical infrastructure norms laid out by the RTE. In fact, this is something that the state of Gujarat has already done.[121]

Nevertheless, this would mean a totally new way of looking at things. As Kingdon put it in a column in *The Times of India*: "The Act is completely silent on the things that really matter: teacher effort, teacher accountability and student learning outcomes."[122]

This is perhaps one of India's bigger challenges, one on which one doesn't find much discussion taking place, at least in the media. As mentioned earlier, between 2006-2015, nearly 10 crore students had completed their elementary education without the ability to do either basic reading or mathematics. This limits their income-earning prospects. It also limits the chances of the success of programmes like *Make in India*.

As TN Ninan writes in *The Turn of the Tortoise*: "Acquiring job-related skills without the benefit of a basic education is a challenge—it is hard to be a fitter or an electrician at a construction site if you don't know basic arithmetic and can't read simple instructions on a product pack."[123]

[iv] The PROBE report does not make this point. It is the author's interpretation of the figures.

[v] The concept of the median is explained in Chapter 4.

[vi] By government, I mean the bureaucrats who provide continuity to the government and not the politicians who come and go.

4. JOBS, JOBS, JOBS!

Haal chaal theek thak hai
Sab kuch theek thak hai
BA kiya hai, MA kiya
Lagta hai wo bhi aiwen kiya
Kaam nahi hai varna yahan
Aapki dua se sab theek thak hai

– GULZAR

I started working for a daily newspaper in October 2005. India, at that point of time, was experiencing multiple booms. One of the booms was in the new equity mutual fund schemes that were being launched.

As someone who had been hired to write on personal finance, I was expected to attend these new fund launches and then write analytical pieces around the same. At its peak, there was almost one new equity mutual fund being launched every week.

On most occasions, there was nothing different about a new equity mutual fund scheme in comparison to the schemes already operating in the market. But then, when a boom is on, no one thinks about these things. The equity market had rallied for a few years, and investors were simply lapping up these new schemes.

Due to various reasons, asset management companies which run mutual funds have always found it easier to raise more money by starting new mutual fund schemes than by selling old ones which have been around for a while and have a performance track record.

In almost all of the presentations that were made on why investors should buy the new scheme being launched, one reason that the fund managers offered was that the India growth story was still going strong. But no one ever bothered to explain what the India growth story actually was. In fact, for a while, I even thought that the fund managers were talking in some sort of code.

As John Lanchester writes in *How to Speak Money*: “Practitioners of almost every métier [i.e., profession], from plumbers to chefs to nurses to teachers to police, have a gap between the way they talk to each other and the way they talk to their customers or audience.”[124]

Over a period of time, I realised that it was much more than that. As Lanchester writes: “There are a lot of things… in the world of money where the explanation is hard to hold on to because it compresses a whole sequence of explanations into a phrase, or even just into a single word.”[125]

The *India growth story* was that kind of phrase. In three words, fund managers encapsulated a whole sequence of things they thought would lead to the Indian economic growth continuing to remain strong in the years to come. Or, if I were to look at it in a cynical sort of way, fund managers wanted to sound like other fund managers. I guess it was a bit of both.

Given the fact that I had no background in writing about these things, it took me a while to understand what the managers meant by the India growth story. While different fund managers meant different things, one common point that almost all of them talked about was India’s demographic dividend.

They felt that India’s coming demographic dividend would keep driving Indian economic growth. And what is demographic dividend, by the way?

The demographic dividend of a country is essentially a period of two to three decades when the birth rates go down, and this leads to a situation wherein the workforce of the country is growing at a faster rate in comparison to its population.

Sanjeev Sanyal explains this in his book *The Indian Renaissance*, where he defines three stages: “In the first stage, there is an increase in the proportion of the young in the population as birth rates stay high but infant mortality declines.”[126] The infant mortality rate is essentially defined as the number of infants who die before reaching one year of age for every 1,000 live births during the course of a given year.

In the second stage, the birth rates come down. This happens primarily because once infant mortality comes down, people start to realise that their children will grow into adults. Hence, they have fewer of them. In the Indian case, the investment made by the government in urban as well as rural health missions has started to have some impact on India’s infant mortality rate.[127] The infant mortality rate in India was 75 in 1996. It has come down to 38 in 2015, as data from World Bank shows.

Along with the infant mortality rate declining, the general technological advances as well as access to medical facilities have improved. This essentially means that, in the coming years, there will be a huge bulge in the number of young people in the country. In this stage, the workforce of the country increases dramatically. This is the demographic dividend. In the third and final stage, the working population falls and the number of old people goes up. This is something that the European countries and Japan are currently facing, and which China is likely to face in the years to come.

India is currently in the second stage. This basically means that the workforce of the country will grow dramatically in the years to come. What do the numbers look like? There are several projections that are available. Let me discuss a few here, starting with Sanyal, whom we have quoted above.

As Sanyal writes: "The UN's projections suggest that India's working age population will rise from 691 million in 2005 to 829 million in 2015 and 942 million in 2025 before stabilising at around 1,050 million in the late 2030s."

So, as per Sanyal's calculations, India will add around 113 million (942 million minus 829 million) to the workforce between 2015 and 2025. This means around 11 million (or 1.1 crore) individuals a year, on an average.

Akhilesh Tilotia comes up with a slightly higher number in his book *The Making of India—Gamechanging Transitions*. As he writes: "Over the next ten years, till 2025, 250 million people will be eligible to join the workforce…. This means that more than 2 million people will become eligible to work every month…. Around 12-15 million people will actively look for employment opportunities every year."[128]

Now how does two million eligible workers a month come down to around a million a month looking for a job? There are essentially two reasons for this. Not all Indian women work. Assuming that two-thirds of them do not look out for a job, the number of 2 million a month comes down substantially. Of course, if more women decide to join the workforce, then the number of one million per month will go up. Furthermore, around five to six million individuals will retire every year. Once we adjust for these factors, the eligible new workforce of 2 million a month comes down to an effective new workforce of 1 million a month.[129]

There is another detailed study on this carried out by TS Papola and Partha Pratim Sahu of the Institute for Studies in Industrial Development. The authors estimate that "about 13 million employment opportunities every year" are needed "to generate productive employment to almost everyone looking for work".[130] The authors estimate that creating thirteen million jobs a year would imply an employment growth rate of 3 per cent per year.

And then there is the estimate made by the Planning Commission for the 12th Five-Year Plan. As the 12th Five-Year Plan document points out: "One hundred and eighty-three million additional income seekers are expected to join the workforce over the next 15 years." This essentially means that around 12 million (1.2 crore) individuals will join the workforce every year in the years to come. This works out to around one million a month. And at this rate, the Indian workforce is expected to be larger than that of China by 2030.[131]

Basically, the four estimates vary, but almost all of them suggest that around a million Indians are entering the workforce every month. Sanyal suggests that 11 million Indians are likely to enter the workforce every year. Tilotia suggests a number of 12-15 million Indians entering the workforce every year. Finally, Papola and Sahu suggest a number of around 13 million. Hence, the numbers vary between 11 and 15 million Indians entering the workforce every year. And the 12th Five-Year Plan talks about around 12 million Indians entering the workforce yearly. Given this, it is safe to say that around a million Indians will enter the workforce every month in the years to come. This amounts to 1.2 crore Indians entering the workforce during the course of the year.

And this is India's demographic dividend. As these individuals enter the workforce, find work, earn money and spend it, the Indian economy is expected to do well. At least, that is how things are supposed to work in theory. But are there enough jobs going around for these individuals who are currently entering the workforce and who will continue to do so for at least the next decade or so?

Before we get around to answering this question, it is important to ask how things have looked in the past. Between 1991 and 2013, the working age population in India increased by 30 crore. At the same time, the number of employed increased by only 14 crore, with the economy absorbing less than 50 per cent of the new entrants into the labour market. This shows the limited capacity of the Indian economy

to generate employment. This is a serious challenge, given that the Indian labour force will continue to expand over the next few decades.[132]

Let's look at some data. In fact, let's start with what the various arms of the government are doing as far as job creation is concerned. Take a look at Table 4.1. It shows the total number of employees working for the CPSEs (Central Public Sector Enterprises) as well as their salaries.

Table 4.1: Employment numbers and salaries of permanent CPSE employees.

Year	Employees (in lakhs) (excluding Contract Workers)	Total Emoluments (in crores)	Per Capita Emoluments (in Rs.)
2006-07	16.1	52,586	3,25,869
2007-08	15.7	64,306	4,10,898
2008-09	15.3	83,045	5,41,716
2009-10	14.9	87,792	5,89,210
2010-11	14.4	98,402	6,83,347
2011-12	14.5	1,05,648	7,28,606
2012-13	14	1,16,363	8,30,263
2013-14	13.5	1,22,322	9,06,665
2014-15	12.9	1,27,387	9,86,598

Source: Public Sector Enterprises Survey, 2014-2015.

The number of permanent employees in the CPSEs was 16.1 lakh in 2006-2007. But by 2014-2015, this had fallen to 12.9 lakh. This essentially means that the CPSEs, on the whole, did not create any new jobs between 2006-2007 and 2014-2015. In fact, the number of jobs came down by around 20 per cent and has been steadily decreasing over the years.

Now how do things look for the central government employees? On January 1, 2006, the central government had a sanctioned strength of 38.3 lakh. Against this, it had 32.7 lakh employees on its rolls. By January 1, 2010, the sanctioned strength had gone up to 38.9 lakh, while the number of employees had fallen to 32.3 lakh.

By January 1, 2014, the sanctioned strength had risen to 40.5 lakh, whereas the number of employees had risen marginally to 33 lakh. So

between 2006 and 2014, the central government basically added around 28,000 jobs.

Let's look at some more data. The number of people working in the public sector in India has come down over the years. The public sector includes people working in the central government, state governments, quasi-government bodies and local governments. In 1991-1992, the year the economic reforms were initiated, the public sector employed close to 1.92 crore individuals. By 2011-2012 (the latest data that is available), it had fallen to 1.76 crore. So, over a period of two decades, the number of jobs in the public sector has come down by 16 lakh.[viii]

Interestingly, the number of jobs in the organised private sector between 1991-1992 and 2011-2012 went up from 78.5 lakh to around 1.2 crore. This basically meant an increase of 2.1 per cent per year. [133] One reason for this has been the fact that the share of contract workers, essentially in the manufacturing sector, has gone up dramatically over the years. In 1995, contract workers made up for around 13 per cent of the manufacturing workforce. By 2011, this had jumped to 34 per cent. This increase in the number of informal workers has also led to a decline in the strength of the collective bargaining of the trade unions. This is also evident in the decline in the number of working days lost due to strikes.[134]

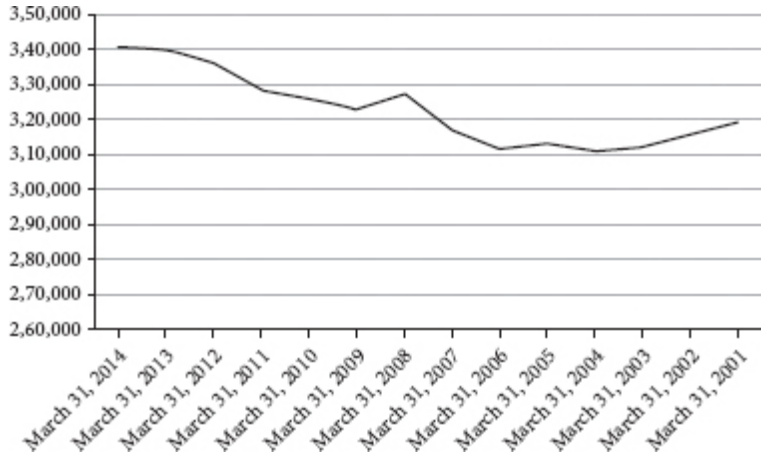
Data released by the Chandigarh-based Labour Bureau in April 2016 suggests that no new jobs were created across eight labour-intensive sectors between October and December 2015. There was, instead, a decline of 20,000 jobs. This was the country's worst performance on the job front since 2009.

The era when the government created jobs is long gone. Furthermore, this data clearly tells us that the formal sector hasn't managed to create enough jobs for the one million Indians projected to join the workforce every month. Also, the public sector jobs data is more than four years old. This is one of the problems with trying to figure out the real employment scene in India. The data in some cases is simply too old.

Let's look at some more recent data. Figure 4.1 shows the number of people working for the Haryana government during the years 2001-2014.

Figure 4.1: Number of employees of the Haryana government between

2001 and 2014.



Source: Census of Haryana Government Employees.

Between March 2001 and March 2014, the number of employees of the Haryana government went up from 3,19,027 to 3,40,698. This means an increase in jobs at the rate of 0.5 per cent per year over a 13-year period. This is far slower than the rate of population growth. Between 2001 and 2011, when the last two Censuses were carried out, the population of Haryana grew by 1.8 per cent per year, on an average.

Interestingly, the total number of people employed by the government of Haryana fell between 2001 and 2004. How do things look if we take March 2004 as the base year? The numbers of jobs then grew by around 0.9 per cent per year.

The point being made is that the number of Haryana government jobs has been growing at a very minuscule pace. The situation is similar at the central government level. But why are we talking about Haryana specifically here?

In May 2016, the Government of Haryana notified the Haryana Backward Classes (Reservation in Services and Admission in Educational Institutions) Act.

The Act provides 10 per cent reservation to the following castes—Jats, Jat Sikhs, Rors, Bishnois, Tyagis and Muslim Jats—in Class III and Class IV government jobs. It also provides a 6 per cent reservation in Class I and Class II jobs to these same castes. Furthermore, the Act provides a 10 per cent reservation to these castes for admission into educational institutes.

In February 2016, Jats had gone on an agitation, resorted to violence and destroyed public property across Haryana to demand reservation in government jobs. The paramilitary forces had to be called in in order to control the mess that followed.

But the point is: Will this reservation in government jobs help the Jats? Or, to ask a more specific question, does reservation in government jobs really help these days? The data that I have shared until now in this chapter clearly shows that reservations are of no help these days because the number of government jobs has either come down or increased at a very minuscule pace.

The question is: Why do people still believe in the idea of reservations? In the recent past, there has been a spate of protests across the country, carried out by people belonging to castes which are generally seen as well off. These include the Kapus in Andhra Pradesh, the Marathas in Maharashtra, the Patels in Gujarat, and the Gujars in Rajasthan.

A simple explanation for this lies in the fact that the salaries paid by the government at lower levels have gone up and are significantly higher than those paid by the private sector. Hence, those who manage to get into a government job on the basis of reservation do benefit. While the government is not creating jobs on the whole, it hasn't stopped recruiting totally and is always recruiting to replace the people who are retiring.

It is worth asking here why the central government can't play the role of Big Government and create jobs directly. In the case of the central government, the simple answer lies in the salaries and pensions that it needs to pay to current and former employees. In 2016-2017, the total salary and pension (excluding the Railways) bill is expected to come in at Rs. 2,25,000 crore. This amounts to a little more than 21.3 per cent of the central government's share of the tax revenues.

Furthermore, the amount that the central government is likely to spend on salaries and pensions in 2016-2017 is Rs. 40,000 crore more than what it did in 2015-2016. Interestingly, the salary and pension bill in 2015-2016 amounted to 19.5 per cent of the central government's share of the tax revenues.

The point being that the money spent on salaries and pensions already forms a significant portion of what the central government

earns every year, and this when the number of central government employees hasn't really gone up at a fast pace. Given this, it is not surprising that the government is really not in a position to create jobs anymore.

****

We have largely looked at the formal sector of employment until now. What about the informal sector, in which a large number of Indians actually work? Almost 92 per cent of the workforce works in the informal sector, with a large proportion of them having low earnings and almost no social security. This basically means that only around 8 per cent of the workforce has regular full-time jobs and access to some sort of a social security system. Even within this bracket, upper caste Hindus and other minorities like Christians, Jains and Sikhs have a disproportionate share of good jobs, given their higher educational attainments. Furthermore, around half of the workforce is self-employed.[135]

If one were to use the kind of terms that venture capitalists and private equity investors like, then we would say that around half of the workers are entrepreneurs or business owners. As Abhijit Banerjee and Esther Duflo write in *Poor Economics*:[136]

> The sheer number of business owners among the poor is impressive. After all, everything seems to militate against the poor being entrepreneurs. They have less capital of their own (almost by definition) and… little access to formal insurance, banks and other sources of inexpensive finance…. Another characteristic of the businesses of the poor and the near-poor is that, on average, they are not making much money.

The point here is that a large part of the workforce is not self-employed by choice but are self-employed because they have no other option. Banerjee and Duflo call them 'reluctant entrepreneurs'. The phrase summarises the situation very well.

Other than the reluctant entrepreneurs, more than 30 per cent of the workforce comprises casual labourers, who seek employment on an almost daily basis. The reluctant entrepreneurs and casual labourers looking for daily work essentially tell us that no one can really afford to stay unemployed. This also tells us why the rate of unemployment is really low in the Indian case. Between 2011 and 2014, the rate of unemployment varied between 3.5-3.6 per cent.[ix] What this clearly tells us is that "the problem is not primarily one of unemployment, but the lack of productive employment".[137]

This is something that we need to explore in a little more detail.

From late September to early October 2016, there was a spate of reports in the media which said that unemployment in India was at a 5-year high.

Indian economic agencies do not measure the rate of unemployment on a regular basis. In the United States, a regular unemployment figure is released every month. In India, this happens now and then when some big surveys are carried out. In mid-September 2016, the Labour Bureau, based out of Chandigarh, released the *Report on the Fifth Annual Employment-Unemployment Survey* (hereafter referred to as the Report).

Using this Report, large sections of the media reported that unemployment in India during 2015-2016 was at a five-year high of 5 per cent. The Press Trust of India in a newsreport said: "The figures could be an alarm bell for the Bhartiya Janata Party (BJP)-ruled government at the Centre."[138] *The Times of India* said: "It shows a continuation of a distressing job situation."[139]

What these statements clearly tell us is that the media was right and wrong at the same time. Furthermore, should a country be bothered about a 5 per cent rate of unemployment, even if it is at a five-year high?

Let's consider the rate of unemployment reported when the previous survey was carried out by the Labour Bureau. The last survey was carried out in 2013-2014, and the rate of unemployment then was 4.9 per cent. Given this, there has hardly been any jump in the rate of unemployment between then and now.

So, should that get us worried, even if the unemployment is at a five-year high? In 2012-2013, the rate of unemployment was 4.7 per cent. In 2011-2012, it was at 3.8 per cent, and in 2009-2010, it was at 9.3 per cent. [140] The Labour Bureau did not publish any report in 2014-2015 and 2010-2011.

So things in 2015-2016 on the unemployment front were a little worse in comparison to 2011-2012, but a lot better than in comparison to 2009-2010. Also, it is important to understand that at any point of time there will be some unemployment in any economy. People will be in between jobs. Some people might have got fired. Some companies might have shut down, rendering people

unemployed. Some businesses could be seasonal. Some skillsets which were in demand might get outdated, and so on.

For a labour market to have flexibility, some unemployment is necessary. A labour market which has 100 per cent employment will make it difficult for employers to hire people. Once these factors are kept in mind, a rate of unemployment of 5 per cent is not that high at all.

With that distinction out of the way, how worried should we be about India's so-called high rate of unemployment? Answer: We should be very worried. But isn't that a contradiction to what I have said until now? Yes, it is. Allow me to explain.

What the media did not tell us in the newsreports is how unemployment is defined. For how long does one need to be unemployed to be counted as unemployed? And this is where things get interesting.

The Labour Bureau essentially measures unemployment using two methods. The first method is called the Usual Principal Status (UPS) Approach. In this approach, "the major time spent by a person (183 days or more) is used to determine whether the person is in the labour force or out of the labour force".

Hence, under this method, anyone who has a job for 183 days or more during the course of the year is considered employed. What does this mean? It means that an individual might have been unemployed for close to half the year but still would be considered to be employed.

As per this method, the rate of unemployment was 5 per cent. The rate was 4 per cent for males and 8.7 per cent for females. These were the figures that were highlighted in the media.

The second method is called the Usual Principal and Subsidiary Status (UPSS) Approach. Here, "a person who has worked even for 30 days or more in any economic activity during the reference period of [the] past twelve months is considered as employed under this approach".

Hence, an individual might not have had a job for 11 months during the course of a year and still would be considered employed. As per this approach, only 3.7 per cent of the workforce was unemployed. The rate was 3 per cent for men and 5.8 per cent for

women.

What this clearly tells us is that the definition of unemployment is fairly broad and, given that, just looking at the rate of unemployment will not give us a clear picture. Take a look at Table 4.2, which gives us a much clearer picture.

What does the table tell us? Only 60.6 per cent of the individuals who were available for work all through the year were able to get work for the entire year. In rural areas, this figure was at 52.7 per cent. This basically means that close to half of rural India cannot find work for all 12 months of the year.

Table 4.2: All-India percentage distribution of persons available for work for 12 months (UPSS approach).

Group	Rural	Urban	All-India
Worked for 12 months	52.7	82.1	60.6
Worked for 6-11 months	42.1	13.2	34.4
Worked for 1-5 months	1.4	0.4	1.1
Did not get any work	3.8	4.3	3.9

Source: *Report on the Fifth Annual Employment-Unemployment Survey*, 2016.

In urban India, 82.1 per cent of the individuals who were available for work all through the year were able to find work for the entire year. This explains why people migrate from rural areas to urban areas. Other than the wages being higher, the chances of getting regular work are also better in urban areas.

In fact, this is the real thing that the media reports should have talked about. But then unemployment at a five-year high was a simplistic (not to mention sexier) headline.

Furthermore, the situation on this front is more or less the same since the last survey was carried out, in 2013-2014. As per the last survey, 60.5 per cent of individuals who were available for work all through the year had been able to find work for that entire year. In rural areas, this figure was at 53.2 per cent. The figures are more or less similar to those of the latest survey.

Indeed, this is where the big worry for India lies. That a huge proportion of the population is not able to find work all through the year.

Another factor that was not highlighted in the media is that India

is a land of reluctant entrepreneurs. Why do I say that? Look at Table 4.3.

Table 4.3: Category-wise employment figures (in percentage).

Approach	Self-employed	Wage/Salary Earners	Contract Workers	Casual Labourers
UPS	46.6	17.0	3.7	32.8
UPSS	47.2	16.2	3.5	33.1

Source: *Report on the Fifth Annual Employment-Unemployment Survey*, 2016.

Close to half of the workforce is self-employed. Some commentators have romanticised this in the past and said that India is a land of entrepreneurs. That is basically rubbish! These people would switch to other jobs if jobs were available in the first place. Why do I say that? Take a look at Table 4.4.

Table 4.4: Category-wise percentage break-up of earning levels.

	Self-Employed	Salaried/ Regular Wages	Contract Workers	Casual Labourers
Percentage of Labour Force	46.6	17	3.7	32.8
Monthly Earnings				
Up to Rs. 5,000	41.3	18.7	38.5	59.3
Rs. 5,001-7,500	26.2	19.5	27.9	25
Rs. 7,501-10,000	17.4	19	20.3	12
Rs. 10,001-20,000	11.1	23.6	11	3.5
Rs. 20,001-50,000	3.5	17.7	2.1	0.3
Rs. 50,001-1,00,000	0.4	1.4	0.1	0
Above Rs. 1,00,000	0.1	0.2	0	0

Source: *Report on the Fifth Annual Employment-Unemployment Survey*, 2016.

What does this table tell us? It tells us that the regular wage/ salaried class of workers make the maximum money. Take the case of the self-employed. More than two-fifths of the self-employed make only up to Rs. 5,000 per month. In the case of the salaried, this is much lower, at 18.7 per cent.

Hence, it doesn't take rocket science to figure out that, if jobs were available, many of India's reluctant entrepreneurs would gladly take them on. There is another reason for this. Take a look at Table 4.5.

This table tells us very clearly that around 63 per cent of the self-

employed are able to find regular work. In comparison, close to 93 per cent of the salaried and those on wages are able to find work all through the year. In the case of casual workers, the situation is even worse, with only around 42 per cent being able to find work all through the year.

And these are India's main problems when it comes to unemployment—the lack of regular work and formal jobs. Hence, looking at the unemployment statistics in isolation doesn't make much sense. Over and above this, there are around one million individuals entering the workforce every month.

Table 4.5: Category-wise percentage distribution of persons available for work for 12 months.

Group	Self-Employed	Wage/Salaried	Contract	Casual
Worked for 12 months	63.4	92.9	71.5	42.1
Worked for 6-11 months	35.3	6.9	27.3	56.2
Worked for 1-5 months	1.3	0.1	1.2	1.6

Source: *Report on the Fourth Annual Employment-Unemployment Survey*, 2014.

This trend is expected to continue over the next 15 to 20 years. The chances of individuals who are currently entering the workforce finding proper formal jobs remain low. Of course, they will manage to do something and earn something. This would mean that the overall unemployment number will remain low, as is the case currently. But most of the individuals entering the workforce won't be able to find regular work.

****

The data regarding the informal sector is, at best, shaky. Also, getting the latest data on the informal sector, even though it comprises such a large proportion of the workforce, is difficult. Nevertheless, there is some data and some important conclusions can be made.

The first thing that can be said is that the overall rate of job growth has been falling over the years. Between 1972-73 and 1982-1983, jobs grew by 2.4 per cent per year. The surprising thing is that this was really not the time when India saw high economic growth. The GDP growth, or economic growth, during the period was at 4.7 per cent per year. Between 1983-1984 and 1993-1994, the economic growth increased to 5 per cent per year. The employment growth rate, though, fell to 2 per cent per year.

After this, employment growth became even worse. Between 1993-94 and 2004-2005, the economic growth stood at 6.3 per cent per year; nevertheless, the employment growth fell to 1.8 per cent per year. And between 2004-2005 and 2009-2010, when the economic growth was on fire, at 9 per cent per year, the employment grew at only 0.22 per cent per year.[141]

In fact, as Mihir S Sharma points out in *Restart—The Last Chance for the Indian Economy*: "In the years between liberalisation in 1991 and today, jobs have grown at an average of only 1.6 per cent per year."[142]

The 66th Round Survey of the National Sample Survey Organisation (NSSO) found that, between 2005-2010, there had been almost no job creation. The government did not like what it found and ordered another large round survey in 2012, something that would have otherwise happened only in 2015. This survey, the 68th Round Survey, found that 15 million (1.5 crore) jobs were created in the two years between 2010 and 2012.[143]

The creation of 15 million jobs basically means that around 7.5 million (75 lakh) jobs were created on an average per year. But assuming that this job growth has carried on since 2012, even that many jobs is not enough to ensure that everyone who is entering the work force gets a job. India needs almost one million jobs to be created every month on an average. And that, clearly, is not happening.

In fact, as the Economic Survey of 2014-2015 points out:

> The data on longer-term employment trends are difficult to interpret because of the bewildering multiplicity of data sources, methodology and coverage. One tentative conclusion is that there has probably been a decline in [the] long-run employment growth in the 2000s relative to the 1990s and probably also a decline in the employment elasticity of growth: that is, a given amount of growth leads to fewer jobs created than in the past. Given the fact that [the] labour force growth (roughly 2.2-2.3 per cent) exceeds [the] employment growth (roughly about 1½ per cent), the challenge of creating opportunities will remain significant.
>
> Regardless of which data source is used, it seems clear that [the] employment growth is lagging behind growth in the labour force. For example, according to the Census, between 2001 and 2011, [the] labour force growth was 2.23 per cent (male and female combined)…. Most estimates of employment growth in this decade [are] closer to 1.4 per cent. Creating more rapid employment opportunities is clearly a major policy challenge.

One reason why enough jobs are not being created is because of what economists call falling labour intensity. Economic growth now

generates fewer jobs in the non-farming sector (basically the industry sector, which includes manufacturing, construction, mining and utilities, plus the services sector) than it used to earlier. For every 1 per cent increase in the GDP, the non-agricultural employment went up by 0.52 per cent between 1999-2000 and 2004-2005. This fell to 0.38 per cent between 2004-2005 and 2011-2012.[144]

Hence, economic growth does not translate into the same number of jobs as it used to in the past. This basically means that economic growth is less labour intensive. This has happened primarily because of two reasons. First, economic growth is now driven by less labour-intensive sectors like business and financial services, as well as information technology and information technology-enabled services. These sectors require only one or two people to produce Rs. 10 lakh of real value added to the GDP. This basically means that faster growth in these sectors does not necessarily translate into jobs.[145]

The second reason for the low labour intensity lies in the fact that the manufacturing sector in India has encouraged automation and decreased its labour dependency. This has primarily happened because of the huge number of labour laws that India has.[146] This also increases the cost of compliance for any business looking to expand through hiring more people.

Hence, enough jobs are not being created. As Sharma writes: "If these young people have to be absorbed, then jobs must grow at [at] least 3 per cent a year—almost twice the rate at which they have since liberalisation. This is simply not happening.... According to the last Census, 47 million (4.7 crore) Indians under the age of 25 are *already* [emphasis original] looking for regular work, but not finding it."[147]

This basically means that, of the nearly 12 million Indians entering the workforce every year, only around half will find jobs. So how can that be a demographic dividend? The other thing that needs to be mentioned here is that job growth in urban areas has been much faster than the corresponding job growth in rural areas.

The employment in rural areas grew at 2.1 per cent per year between 1972-73 and 1982-83. It fell to 1.7 per cent per year and 1.4 per cent per year during the next two decades, respectively. Between 2004-2005 and 2009-2010, rural employment declined at the rate of 1.65 per cent per year. When it comes to urban areas, the employment growth rate stood at 4.1 per cent per year between 1972-1973 and

1982-1983. Over the next two decades, it stood at 3.2 per cent per year and 3.3 per cent per year, respectively. Between 2004-2005 and 2009-2010, the employment growth was at 1.8 per cent per year.[148]

This, again, explains why people migrate from rural areas to urban areas. As per the 2001 Census, around 30.7 crore, or nearly 30 per cent of the population, were internal migrants.[149] Projections suggest that, as per the 2011 Census, this number has gone up to around 40 crore, or around 33 per cent of the population.[150] This was up from the 27.4 per cent of the population figure in 1991.[151] Needless to say, migration from rural to urban areas creates its own share of social, economic and political challenges.

Other than the lack of employment opportunities, there is a huge wage gap of around 45 per cent between rural and urban India. Even after adjusting for the higher cost of living in urban areas, the wage gap is still around 27 per cent.[152] This difference in wages also leads to more people migrating.

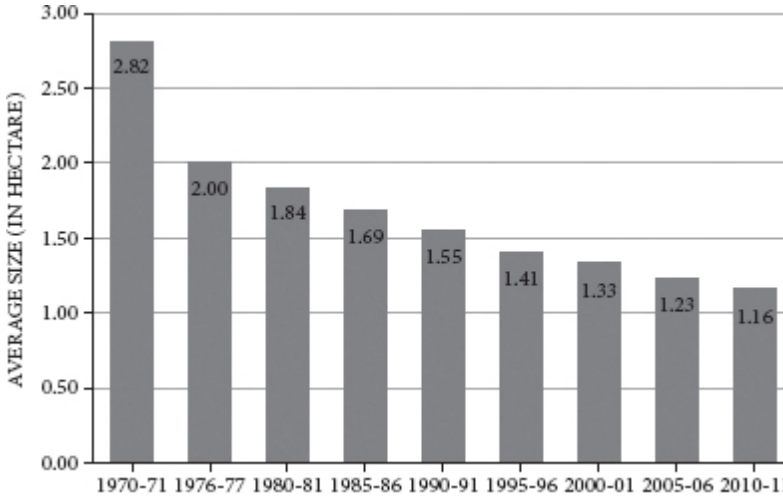
Furthermore, employment generation becomes even more important given that there is huge disguised unemployment in the rural areas. Disguised unemployment essentially means that there are way too many people trying to make a living out of agriculture. On the face of it, they seem employed. Nevertheless, their employment is not wholly productive, given that agricultural production would not suffer even if some of these employed people stopped working.[153]

Agricultural production currently forms around one-sixth of the Indian economy. Nevertheless, it employs half of India's population. This explains why there is widespread disguised unemployment in the agriculture sector. There are far more people employed in it than the sector requires. Hence, only 17 per cent of those who depend on agriculture for a living depend only on the income that they make from agriculture. [154] Everybody else does something else additionally to earn an income.

A major reason for this lies in the fact that the average size of a farmer's landholding has fallen over the years. As the State of Indian Agriculture Report of 2012-2013 points out: "As per [the] Agriculture Census [of] 2010-11, small and marginal holdings of less than 2 hectare[s] account for 85 per cent of the total operational holdings and 44 per cent of the total operated area. The average size[s] of [the]

holdings for all operational classes (small & marginal, medium and large) have declined over the years, and for all classes put together it has come down to 1.16 hectare[s] in 2010-11 from 2.82 hectare[s] in 1970-71." (This can be seen from Figure 4.2.)

Figure 4.2: Decline in the average size of agricultural landholdings between 1970-1971 and 2010-2011.



Source: State of Indian Agriculture Report, 2012-2013.

The agriculture census is carried out every five years. Hence, the latest available data is that of 2010-2011. The trend of falling farm sizes can be clearly seen from Figure 4.2. As the same piece of land has got divided among more and more family members over the generations, the average holding has fallen dramatically. Even though quite a few migrate to the cities, they still keep their farmland.

What does not help is the fact that India does not have clear land titles. As the economist Hernando de Soto writes in *The Mystery of Capital—Why Capitalism Triumphs in the West and Fails Everywhere Else*: "In a developed country, the farmer's son who wishes to follow in his father's footsteps can keep the farm by buying out his more commercially minded siblings. Farmers in many developing countries have no such option and must continually subdivide their farms for each generation until the parcels are too small to farm profitably."[155]

One of the major repercussions of this is that the agriculture per capita income is much lower than both the overall per capita income of India as well as the per capita income of those who do not work in agriculture. Let's do some number crunching to drive this point home.

Data from the World Bank tells us that, in 2014, India's population was 129.5 crore. The population growth rate in 2014 was at 1.2 per cent. Assuming that the population in 2015 grew at the same rate, the population for 2015 comes in at around 131 crore.

Around half of India's population depends on agriculture. Hence, around 65.5 crore out of the 131 crore are still dependent on agriculture. Data from the Central Statistics Office (CSO) shows that, in 2015-2016, the total contribution of agriculture, forestry and fisheries to the GDP (at current prices) was Rs. 20,82,692 crore. The GDP at current prices does not take inflation into account while calculating the GDP.

Hence, the per capita income of every individual dependent on agriculture, forestry and fishing works out to around Rs. 31,797 (Rs. 20,82,692 crore divided by 65.5 crore).

Now, how do things look for the other half, which is not dependent on agriculture? Their total contribution to the GDP was Rs. 1,01,69,614 crore. Hence, their per capita income works out to Rs. 1,55,261 (Rs. 1,01,69,614 crore divided by 65.5 crore).

What these calculations tell us is that, in 2015-2016, those not working in agriculture earned nearly 4.9 times the amount of those working in agriculture. If we were to use GDP at constant prices (at 2011-2012 prices), the ratio comes up to 5.5. GDP at constant prices essentially adjusts for inflation. Another estimate puts the ratio between the per capita incomes of the non-agriculture and agriculture workers at 6:1.[156]

And this huge differential in the per capita income between those who work in agriculture and those who don't is among India's largest problems. This also shows the tremendous inequality present in the country between those who depend on agriculture for a living and those who don't.

In fact, there is another important point that needs to be made here. Rs. 31,797 is the *average* per capita income of those dependent on agriculture for a living. Even within that low a level, there would be variations.

John Lanchester defines per capita income in his book *How To Speak Money* as "the total Gross Domestic Product (GDP) of a country divided by the number of people in the country…. It is a measure of

how rich the country's citizens are on average – though it is a very rough measure of that".

The point being that the per capita income may not be the right representation of the total population, as many people may have an income lower than the per capita income. Let's understand this through an example.

As Charles Wheelan writes in *Naked Statistics—Stripping the Dread from the Data*: "Imagine that ten guys are sitting on bar stools in a middle-class drinking establishment…. Each of these guys earns $35,000 a year, which makes the mean annual income for the group $35,000."[157]

The software billionaire Bill Gates now walks into the bar. As Wheelan writes:[158]

> Let's assume for the sake of the example that Bill Gates has an annual income of $1 billion. When Bill sits down on the eleventh bar stool, the mean annual income for the bar patrons rises to about $91 million. Obviously none of the original ten drinkers is any richer. If I were to describe the patrons of this bar as having an average annual income of $91 million, the statement would be both statistically correct and grossly misleading.

The point being that the average, or the arithmetic mean, of a given set of numbers can be very misleading at times. One thing that clearly comes out through this example is that the majority of the numbers that constitute an average can be lower than the average.

As was clear in this example, ten out of eleven men in the bar had a lower income than the average income of $91 million. Here is another interesting example. As Robert Matthews writes in *Chancing It —The Laws of Chance and How They Can Work for You*: "The world's men provide an excellent example – in the shape of their penises. Or, to be more precise, size: according to research, the average length is 13.24 centimetres, but the median value is 13 centimetres."[159]

Now what do we mean by median value? As John Allen Paulos writes in *Beyond Numeracy*: "The median of a set of numbers is the middle number in the set." Let's go back to the bar example. Let's say the eleven individuals in the bar are made to sit in the ascending order of their income. The individual setting on the sixth stool would represent the median income of the group. Thus, the median annual income of the eleven men (which includes Gates) is $35,000.

Now let's get back to the penis example. The average length of a man's penis is 13.24 centimetres. But the median value is 13 centimetres. What does this mean? As Matthews writes: "First, it shows that the global distribution of penis sizes is skewed towards smaller values, and second, that most men really do have *below*-average-sized [emphasis original] penises."[160]

This basic point, i.e., that the median value can be lower than the average value, becomes very important when we talk about a concept like per capita income. Per capita income is basically the average income. The average income also includes the income of the rich. As Wheelan writes: "The mean, or average, turns out to have some problems in that regard, namely, that it is prone to distortion by 'outliers', which are observations farther from the center."

So, basically, the Ambanis, Adanis, Birlas and Tatas of the world, essentially India's rich, push up the average income of India, i.e., the per capita income. As Wheelan writes: "The average income… could be heavily skewed by the mega-rich."

In this scenario, the average income does not give us a correct picture. Hence, it is safe to say that *the income of the average Indian is lower than the average income of an Indian*. The same logic applies to the per capita income of a farmer. It includes the income earned by the rich farmers as well, and hence, does not give a correct picture.

What we need to look at is the median income of the Indian farmer. The trouble is that such data is not available. But what we can safely say is that the median income of the Indian farmer is lower than the average income of Rs. 31,797. This tells us how dire the situation is for Indian farmers. It also tells us why people need to be moved away from farming and agriculture as a way of making a living. Of course, this doesn't sound politically correct, given that we Indians have been brought up on the spin of " *Bharat ek krishi pradhan desh hai* [India is primarily an agricultural country]". But employment in agriculture is not really a solution for India's burgeoning demographic dividend.

As the 12th Five-Year Plan document points out: "Agriculture cannot be expected to provide more jobs. Manufacturing must provide a large portion of the additional employment opportunities required for India's increasing number of job seekers. Unless manufacturing becomes an engine of growth, providing at least 70 million [7 crore]

additional jobs, it will be difficult for India's growth to be inclusive…. [We must] increase the rate of job creation in manufacturing to create 100 million [10 crore] additional jobs by 2025."

While the Planning Commission was disbanded in 2014, the broader point it made about creating jobs outside agriculture remains valid, i.e., people need to be moved away from agriculture. This is a very obvious thing. But the problem is that even low-end manufacturing jobs need people to have some basic education. As we have seen in Chapter 3, close to 10 crore individuals who had passed out of primary school between 2006 and 2015 do not have basic reading skills or the ability to do basic mathematics.

And this is where the Indian education system is likely to fail the *Make in India* programme, which was launched with great fanfare by Narendra Modi after he became the Prime Minister in May 2014. The programme was launched in September 2014, but is yet to take off. And when it does, it will soon find it difficult to find individuals with some basic education who can actually work in a manufacturing firm.

Furthermore, given the fact that a huge proportion of the individuals coming out of the Indian education system continue to remain unskilled and lack the basic capability to read and do maths, their employability in even the services sector remains low. The Big Government that operates in India is responsible for this, first by ignoring primary education, and then by coming up with the Right to Education Act, where physical infrastructure is more important than learning outcomes.

As Robert H Frank writes in *The Darwin Economy—Liberty, Competition, and the Common Good*: "The mere fact that a market outcome is less than perfect does not mean that government intervention would necessarily lead to a better outcome. Governments are imperfect, too. The important point is that the ultimate decision about whether regulation makes sense should hinge on purely practical questions about [the] efficacy of [the] proposed regulatory remedies."[161]

The 'regulatory remedies' that the Right to Education Act came up with ended up making the situation worse instead of improving it.

The larger point being made here is that moving people from agriculture into other areas is not so easy. In fact, other countries which have grown at a very fast pace in the past have experienced the

same phenomenon. Take the case of Thailand. Agriculture still constitutes close to 40 per cent of its workforce. Or China, which has become the factory of the world. Around 35 per cent of the workforce is still engaged in agriculture, even though it produces just 10 per cent of the Chinese economic output.[162]

Hence, the disguised unemployment in Indian agriculture is going to remain high, and that's not something that is going to change quickly. And India's demographic dividend is going to have problems finding jobs in the years to come. That remains India's biggest social, political as well as economic problem. The irony is that no one is even talking about it. We are all caught up in the spin that India is destined for bigger things in the days to come. The numbers clearly don't suggest that.

[viii] Data from the Centre for Monitoring Indian Economy.

[ix] World Bank data, which differs a little from the unemployment data shared later in the chapter.

5. WHY ENGINEERS AND MBAs WANT TO BECOME PEONS AND SWEEPERS

JOBS
FOR
ALL

Papa kehte hain bada naam karega…
Koi engineer ka kaam karega.

– MAJROOH SULTANPURI

In the previous chapter, we saw a number of estimates for the number of individuals expected to enter the Indian workforce in the years to come. Based on these different estimates, it is safe to say that around one million new individuals are entering the workforce currently every month. And they will continue to so in the years to come.

In fact, in January 2014, CRISIL Research, one of India's premier research companies, made another estimate of the number of jobs being created and the number of Indians entering the workforce every year. While it is similar to the earlier estimates, they nonetheless made a few other interesting points as well.

In this report, titled 'Hire & Lower—Slowdown Compounds India's Job Creation Challenge', CRISIL said that, between 2004-2005 and 2011-2012, around 52 million (5.2 crore) jobs were added to India's industry as well as services sector. This pulled nearly 37 million (3.7 crore) individuals out of agriculture and thus brought down the disguised unemployment in agriculture. But this pace is unlikely to be maintained between 2011-2012 and 2018-2019. During this period, around 51 million (5.1 crore) individuals will have entered the workforce.

The CRISIL number is lower than the one million per month number that almost all other projections had come up with. Against the 51 million individuals entering the workforce, only around 38 million (3.8 crore) jobs are expected to be created. The remaining individuals will either stay unemployed or join the agriculture sector.

With more individuals working on the farms, the disguised unemployment figure is likely to go up. The data between 2004-2005 and 2011-2012 clearly shows that, if there are sufficient job opportunities going around in the other sectors, the number of people working in agriculture can actually come down. In fact, if the proportion of the Indian workforce working in agriculture has to come down from 50 per cent to 25 per cent, then the industrial sector would

have to increase its labour demand to 274 million (27.4 crore) in 2030 from 119 million (11.9 crore) in 2010.[163]

This means the creation of 155 million (15.5 crore) jobs, and that is a huge number. But this is necessary, given that, as we have seen in the last chapter, the average per capita agricultural income is Rs. 31,797. The median per capita income is even lower. The point being that agriculture cannot take on any more people than it already has. And the only way this is going to happen is if jobs in other sectors are created.

Also, just creating jobs is not going to be enough. People need to have certain skills to carry out these jobs, which is something they currently lack. The Economic Survey of 2014-2015 summarises the situation best: "As per the Labour Bureau Report (2014), the current size of India's formally skilled workforce is small, approximately 2 per cent; this number compares poorly with smaller countries like South Korea and Japan, which report figures of 96 and 80 per cent, respectively. At the all-India level, around 6.8 per cent of persons aged 15 years and above are reported to have received / are receiving vocational training."

The size of the skilled workforce does not include those skills that are informally acquired.[164] But the skill rate is still very low. Furthermore, the proportion of people receiving vocational training is not high either.

Interestingly, most people trying to move out of agriculture (even temporarily) target the construction sector. This is primarily because low-end jobs in the construction sector do not really need much of a skillset. The sector created close to 4.5 crore jobs either directly or indirectly during 2012-2013.[165]

Most of these workers taking up jobs in the construction sector are unskilled. They lack education as well as formal training. They pick up skills on the job from peers as well as supervisors. This obviously means that their performance is not up to the mark and their productivity is low. Among the 10 per cent of construction workers who happen to be skilled, emigration abroad (in particular to the Gulf countries) in search of higher wages is a common phenomenon. This creates a shortage for Indian firms, pushing them to import workers in order to complete their projects.[166]

In 2008, DLF, which was among the biggest of the listed

companies at that point of time, with its owner, KP Singh, even making it to the list of richest Indians, had to get skilled carpenters, steel fixers and electricians from China, Indonesia and the Philippines. This was done primarily because these individuals came cheaper and were more productive than their Indian counterparts. In fact, Reliance Industries did something similar when it hired nearly 4,000 Chinese construction workers for the construction of its oil refinery at Jamnagar.[167]

This isn't surprising, given the low-skill levels of the Indian workforce. In fact, one study on the skills of plumbers found that "55-66 per cent [of] candidates are unable to handle real-world plumbing situations".[168]

In fact, large Indian firms have been very vocal while complaining about the lack of skilled carpenters and quality masons. This lack of skill becomes even more important when one takes into account the fact that the "increasing use of technology and mechanisation is expected to reduce the requirement of unskilled workers on individual construction sites".[169]

Table 5.1: Incremental requirement for key skills in the construction sector in India by 2022.

Profile	Incremental Requirement (in thousands)	Skill Level
Project Managers and Engineers	473	Specialised
Supervisors	473	Specialised
Surveyors	47	Specialised
Foremen	946	Vocationally Trained
Crane Operators	7	Vocationally Trained
Electricians	473	Vocationally Trained
Welders	473	Vocationally Trained
Plumbers	1,183	Vocationally Trained
Carpenters	1,892	Vocationally Trained
Others (including	459	Vocationally

Painters & Equipment Operators)		Trained
Steel Fixers	1,419	Vocationally Trained
Masons	1,419	Vocationally Trained
Minimally Educated	38,038	
Total	**47,302**	

Source: Human Resource and Skill Requirements in the Building Construction and Real Estate Sector, NSDC-KPMG.

Large firms in the construction business have been vocal about the negative impact of the lack of skilled carpenters and masons on the quality and delivery of projects. In fact, Table 5.1 shows the number of skilled professionals that would be needed in the construction business by 2022.

The construction industry needs around 4.7 crore individuals by 2022. Of this, the industry needs 11.8 lakh plumbers and 18.9 lakh carpenters. From personal experience, I can tell you that trying to get hold of a good plumber who can do the most basic stuff properly is a struggle these days. In this environment, trying to get close to 11.8 lakh skilled plumbers is going to be a huge challenge.

Another estimate puts the incremental human resource requirement in the sector at around 1.4 crore between 2013-2017 and 3.1 crore between 2013-2022.[170]

Until a few years ago, the government dominated the low-end training space through the 8,500 Industrial Training Institutes (ITIs) spread out all across the country. The price of attending these institutes can be very low. But they really did not solve India's skilling problem in any way.

As Mihir S Sharma writes in *Restart*: "These are places with ridiculous entry-level qualifications… too-few seats and… overlong courses. But here's the kicker: they're unlikely to change, because they don't really care about their students…. How can I make a claim so sweeping? As a simple deduction from the following fact…. Not one of the ITIs in India has a full-time placement officer. It isn't the trainers' job to get their trainees jobs."[171]

One estimate suggests that, at the ITIs, when it comes to construction skills, around only 3 lakh individuals can be trained every year. Hence, there is a limit to the number of people the ITIs can train for the construction industry. What does not help is that getting into these institutes to become a plumber or a carpenter requires educational qualifications which most people looking for such training do not really have.

Take the case of the states of Uttar Pradesh and Maharashtra, two of the larger states. If you want to get into a carpentry course in an ITI in these states, you need to have passed Class VIII along with Science having been one of the subjects. The same requirement holds for those wanting to take up courses on plumbing or masonry.[172] What does studying Science till Class VIII have to do with trying to become a carpenter or plumber, or even a mason for that matter? Beats me!

It is important that the carpenter or the plumber or the mason be able to read and write and do certain basic maths that he would require during the course of his work. But how does it matter if he can't define photosynthesis?

The vocational training system offered by the government (or should I be saying Big Government?) the way it is structured targets less than 50 per cent of the entire working population of India.[173] This is primarily because a huge proportion of students drops out of the elementary education system. The learning outcomes of those who stay on are nothing to write home about.

Furthermore, those who manage to stay in school up to the secondary level (i.e., up to Classes IX-X) end up enrolling in a computer-related course because of the greater prestige associated with it as well as the perceived higher wages that come with anything associated with information technology in India.[174]

Also, it is worth pointing out here that, of the 849 ITIs in UP, only 15 offer plumbing as a course. As far as masonry is concerned, not one ITI across the state offers training in it. The carpentry course is offered in around 10 ITIs, and building construction in just one. By comparison, 172 ITIs in Uttar Pradesh offer courses on becoming a computer operator or a programming assistant. This shows very clearly the great love that Indians have for an office job. Let's look at the state of Maharashtra and see how things are there. The state has around 807 ITIs in total. Of these, plumbing is taught in 106

institutes, carpentry in 125, and masonry in 60. But 345 institutes offer courses for becoming a computer operator and a programming assistant.[175]

An estimate suggests that Uttar Pradesh and Maharashtra are producing around 40,000 carpenters, masons and plumbers annually. And this is nowhere near what is required by the industry. It is just one per cent of the annual requirement.[176]

The situation in Maharashtra is clearly not as bad as it is in Uttar Pradesh. Nevertheless, more institutes still teach the computer course. Skills like plumbing, masonry and carpentry are extremely important and need to be taught in almost every district of the country. But that is clearly not happening.

This is another very good example of how Big Government makes a hash of things. By insisting on a certain level of education and not offering courses it should actually be offering, the government essentially ends up stifling something which it should instead be ensuring does well. It doesn't take any complicated science to figure out that a country as big as India is and having as many people as India does cannot completely depend on the government in order to improve the skills of a large section of its population.

Some companies have realised this and set up their own skill-training centres. Take the case of Larsen and Toubro. The engineering firm, which takes up construction projects among other things, set up the Construction Skills Training Institutes (CSTIs) in 1995. Currently, there are eight such institutes across the country. The training period varies from anywhere between 200 hours spread out over one month to 600 hours spread out over three months.[177]

It is interesting to point out that the company hasn't made the same mistake as the government. An individual interested in a carpentry or masonry course just needs to be able to read and write, unlike in an ITI, where he needs to have studied till Class VIII. Also, the ITI course normally lasts for three years. The courses offered by the CSTIs are from anywhere between one to three months. The training is delivered in the local language and the people passing out of the institutes are employed by the subcontractors of the company.[178]

The company has trained around 50,000 individuals over the past

two decades. This tells us very clearly that even those companies operating their own training institutes cannot, for all that, bridge the larger skill gap.

What we have seen until now is that the government's sole solution, in the form of courses offered by the ITIs for building the skillsets of Indians, hasn't really worked. At the same time, private companies, operating on their own will, lack the scale required to make a substantial difference.

Furthermore, if we go beyond a few large firms, the firms operating in the construction sector lack the incentive to train their own workers. Most of these firms are either micro-firms, with less than ten workers on their rolls, or small firms, with ten to fifty employees. These firms choose to remain small because of the high cost that comes with following the surfeit of India's labour laws, which start to kick in once firms employ more than 100 people. Also, these firms employ contractual workers, who are paid daily wages. Given this, they really don't have much incentive to train and skill these workers.[179]

In this scenario, the best possible solution is one in which the government incentivises private firms to offer vocational training. And this is precisely what is being done through the National Skill Development Corporation (NSDC) over the past few years. As Akhilesh Tilotia writes in *The Making of India*: "With the government now opening up its purse-strings for private companies to receive grants (low-cost debt, equity funding via NSDC) and zero-cost debt[s] (Rs. 2.5 crore interest-free loan[s] for each ITI) for starting training institutes at the lower end, there is now an active interest [being taken] by the private sector in the training space in low-end skill development."[180]

The NSDC was set up in 2008 with the objective of creating a market ecosystem for skill development. Between 2008 and March 31, 2015, it had trained more than five million (50 lakh) people. Of this, around 3.4 million (34 lakh) people were trained in 2014-2015. This basically tells us that it is only after the Narendra Modi government came to power that the NSDC actually started to work at some pace. It set a target to train 6.6 million (66 lakh) people in 2015-2016, double of what it had achieved in 2014-2015.[181]

The NSDC has a target to train 150 million (15 crore) people by

2022. And given this, it has to scale up rapidly if it wants to get anywhere near that target. As of writing this, the figures for 2015-2016 were not available. But, assuming that the NSDC achieved that target, it is still a long way away from the 150 million target. It still needs to train around 138 million (13.8 crore) individuals. This has to be done within a period of five to six years. This means training close to 23-27 million (2.3-2.7 crore) people per year for the remaining five to six years. And that is a daunting task, to say the least.

This task becomes even more important when we take into account the fact that over 97 per cent of individuals aged between 15 and 65 have had no exposure to any training. Hence, there is a great need for offering training as well as expanding the outreach of those who provide the training.[182]

The good thing is that, unlike the ITIs, the NSDC works through its partners and tries to place those it has trained. For 2014-2015, 66 per cent of those trained were placed. As the NSDC annual report points out: "While the overall placement percentage remains around 66 per cent, a large number of people have become self-employed post-training." Since its inception, the NSDC has done a decent job of placing the individuals that it trains in skills, as can be seen from Table 5.2.

Table 5.2: NSDC's training and placement track record.

Financial Year	Training Completed	Placement	Achievement (in per cent)
2010-11	20,484	14,399	70
2011-12	1,81,691	1,44,238	79
2012-13	4,02,506	2,16,889	54
2013-14	10,05,074	6,47,188	64
2014-15	20,36,570*	12,28,299	60**
Total	36,46,325	22,52,013	62

* The number does not include people trained through the STAR scheme (also known as the National Skill Certification and Monetary Reward Scheme), which has a mandate to skill one million people. Hence, the number is lower than the 3.4 million (34 lakh) number quoted earlier.

** The figure is different from the 66 per cent placement that S Ramadorai, the Chairman of NSDC, talks about in the annual report.

Source: www.nsdcindia.org.

The NSDC is obviously doing better than the ITIs when it comes to

training as well as placement. As its annual report points out: “NSDC this year [2014-2015] managed to build a network of 211 training partners, with 3,611 training centres providing standardised vocational education.” Another major issue with the ITIs has been that they have been following an outdated curriculum. Having said that, all is not well with the NSDC. There has been talk about the training not being good enough. In fact, some of the larger training partners had got their employees re-skilled and got the government to pay for it.[183]

In an interview, Rajiv Pratap Rudy, who heads the Ministry of Skill Development and Entrepreneurship, admitted to the same, i.e., about some corporates passing on their training costs to the government. Furthermore, the NSDC wasn’t tracking placements, the minister claimed. As he said: “Earlier, they would claim 70 per cent placements. Now, at least they admit that this is not really happening.”[184] Tracking placements is very important, because that is what will make the NSDC different from the ITIs.

These are the perils associated with an organisation which is looking to expand at a fast pace. The NSDC needs to grow fast if it has to get anywhere near training 150 million, or 15 crore, individuals by 2022. Nevertheless, this approach, where private sector enterprises are involved and the government is looking at creating a market-based solution to the skilling problem, is better than what has been tried in the past, where the government tried to do everything on its own through the ITIs. Of course, there are going to be problems with the new approach as well, and these will have to be tackled quickly and efficiently.

****

Until now, we have talked about skilling and vocational training at the mass level. But how are things with engineers and MBA-degree holders (traditionally called MBAs)? Are their skillsets up to the mark? It turns out that they are not. In fact, CRISIL Research, through interactions with the industry, found that around 70 per cent of engineers are unemployable because they lack both technical skills and soft skills.[185]

The Aspiring Minds 2016 National Employability Report of Engineers found similar results. It found that only 17.9 per cent of engineers were employable in the software services sector. The

number had stood at 18.4 per cent a year earlier. Only 3.7 per cent of engineers were employable for software products, against 3.3 per cent a year earlier. When it came to non-functional roles, such as business process outsourcing, only 40.6 per cent were employable, against 39.8 per cent a year earlier.

The study also found that 52.2 per cent of engineers were rejected because they were not soft skills trainable in a short period of time. Around 49.3 per cent were rejected because they were not technically trainable in a short period of time. The training is usually imparted over a period of three to six months. The study also found that the English language skills, both written and spoken, of engineers were not up to the mark. Take the case of the role of analytics in the Knowledge Process Outsourcing industry. Only 11 out of every 100 engineers are good enough to be employed in this sector. Almost 72.8 per cent of engineers do not have English language skills, which are so necessary for this role. Nearly 59.4 per cent do not have the required analytical and quantitative skills.

I had been brought up with the impression that engineers had good mathematical and analytical skills. Of course, this impression was all wrong. I figured this out when I started my MBA at one of the better business schools in India. It was then that I realised that many engineers in my class did not have basic analytical skills. Some of them didn't even know how to go about calculating the compounded average growth rate (CAGR) of something over a period of time. This is something I was taught in my fifth or sixth standard, when we were taught the basic concept of compound interest.

A degree in engineering and analytical skills probably went together until the late 1980s, when there were only a few engineering colleges around. Back then, it was difficult to get into an engineering college, and only the best of the lot made the cut. The same is not true anymore.

In 2006, India had a total of 6.6 lakh engineering seats on offer. By 2015, this had jumped to 16.7 lakh.[186] This huge jump in numbers has impacted the quality of students graduating out of engineering colleges. This trend is also visible in the fact that around 30 per cent of those unemployed in 2011-2012 were at least college graduates and above. This number was at 24 per cent in 2004-2005.[187]

One reason for this massive jump in the number of engineering

colleges is because politicians have got around to setting up many engineering colleges over the last few decades. A 2003 newsreport in *The Economic Times* talks about politicians owning a bulk of the engineering colleges in Maharashtra. Of the 137 private engineering colleges, 104 were owned by politicians. Only twelve colleges were run by organisations which had no political influence. The remaining were run by businessmen along with politicians. The state had only 20 government-run engineering colleges at that point of time.[188]

There is no real reason to believe that the situation would have changed since then. Maharashtra is not the only state facing this problem. Newsreports suggest that engineering colleges in states like Tamil Nadu, Orissa, Karnataka, the erstwhile Andhra Pradesh,[x] etc. all have colleges owned by politicians.

Given the fact that many of these engineering colleges were set up by politicians, the All India Council for Technical Education (AICTE) went easy on approving these institutions. For politicians, establishing engineering colleges (on cheap government land, I might add) was a good way of putting their ill-gotten black money to use.

Also, once the college was in place, the hope was that the management quota seats would keep bringing in the black money. This would also be done by ensuring that the society running the engineering college did not own any assets of its own and that everything was on hire. Black money, as we shall see in Chapter 9, is another manifestation of Big Government.

Hence, education made for a great business model. The key assumption here was that the demand for engineers by information technology companies would keep exploding. Of course, the model also worked on the assumption that an engineering degree would continue to be aspirational for middle class and lower middle class households.

In fact, a February 2015 report on black money put out by the business lobby Federation of Indian Chambers of Commerce and Industry (FICCI) points out:

> Misuse of the tax incentives available for indulging in charitable activities and manipulations through entities claimed to be constituted for non-profit motive are among the sources of generation of black money in the non-profit sector. The Indian education system generates about Rs. 48,400 crore of black money every year. The major source of unaccounted money is the capitation fee used for getting admission to UG [under-graduate], PG [post-graduate], medical,

> engineering and other professional courses. IT authorities detected Rs. 288 crore of black money with educational institutes in 2009-2010, a growth of 550 per cent from 2008-2009.

Given that most educational institutions are run by politicians, it wasn't surprising that the Income Tax authorities managed to detect only Rs. 288 crore.

Hence, this proliferation of engineering colleges run by politicians has made it easy for students to get into an engineering college. But, at the same time, this has led to the quality of learning coming down, given that many engineering colleges do not even have the most basic facilities in place. Also, the teaching staff quality is poor.

But the fascination for an engineering degree remains, especially among parents. In my extended family, when a kid grows up, the parents push him or her towards getting an engineering degree. If I may be allowed to generalise a bit further, this is largely true for the Kashmiri Pandit community, which my parents belong to.

Once a youngster gets into an engineering course, all is forgiven, and it is automatically assumed that the future will now be bright. And this may have been largely true for the nineties and the 2000s, when India's information technology companies were taking off. But now we are in the teens, and the story has changed.

Why? The 'indifference principle' is at work. As Steven E Landsburg writes in *The Armchair Economist*: "Unless you're unusual in some way, nothing can ever make you happier than the next best alternative."[189]

Landsburg explains the indifference principle through an example. As he writes: "Would you rather spend a bright summer day at the shopping mall or the… Fair? … If the Fair is more fun than the mall, people flock to the Fair, building up the crowd size until it's *not* [emphasis original] more fun than the mall."[190]

So, the Fair doesn't remain fun anymore because way too many people turn up. Something similar has happened to the engineering degree in India. The country is producing way too many engineers. As Philippa Halmgren writes, in a slightly different context, in *Signals—How Everyday Signs Can Help Us Navigate the World's Turbulent Economy*: "Whenever the majority of the population seeks to pursue the same idea at the same time, it usually ends in tears. It is a sure sign of trouble when 85 per cent of business school graduates want a

job in the financial markets."[191]

****

As we saw earlier in the chapter, India had around 16.7 lakh engineering seats in 2015. In fact, the country now produces more engineers than China and the United States combined.

As Akhilesh Tilotia writes in a research note titled 'How many graduates are required to change a light bulb?': "[The] engineering graduate output of Indian universities stood at 15 lakh a year in 2014-2015, up from 3 lakh in 2004-2005."[192] Tilotia's estimate on the number of engineering seats in India is a little different from the estimate quoted earlier, but the difference between the two estimates is not that much.

Hence, over the last decade, the number of engineers being produced has gone up five times. In 2016, 15 lakh engineers are expected to graduate in India. China is expected to produce 11 lakh engineers, and the United States, just one lakh.[193] One impact of so many engineers being produced is that it has "reduced the importance of capitation fees". Capitation fees are huge generators of black money for politicians, who typically run engineering colleges.

Even though the number of engineering seats has increased dramatically and it has got much easier to get into an engineering college, the trouble is that the employment opportunities for engineers haven't gone up at the same rate.

Information technology companies, which were taking in a bulk of the country's engineering graduates, continue recruiting at the same pace as they were in the past. The net hiring by information technology companies had remained stagnant, at around 2.5 lakh per year, for the period of the five years up to March 31, 2015. These numbers also include the engineers recruited by the business process-outsourcing companies. For the financial year ending on March 31, 2015, the number of employees recruited by the information technology companies had stood at 2.1 lakh. [194]

The fascination of Indian parents for pushing their children towards getting an engineering degree has been built on hearing too many success stories of Indian engineers working in information technology companies in the United States (on dollar salaries) and other parts of the world.

Even those Indian engineers who have settled in the country and had started working for the information technology companies in the nineties and up to the mid-2000s have done well for themselves. And these success stories have had a lot of impact on the thinking of parents.

The trouble is that the story has changed. This is clearly visible in the huge number of seats across engineering colleges that find no takers across the country.

Take the case of Maharashtra, which has 1.35 lakh engineering seats. Newsreports point out that around 51,000 seats went vacant in 2016.[195] That is around 38 per cent of the total seats. In Tamil Nadu, close to 1.2 lakh seats in engineering colleges found no takers.[196] Tamil Nadu has the highest number of engineering seats in the country, at around 2.79 lakh. Maharashtra comes in second.

In fact, as the government told the Lok Sabha in August 2016: "Overall, there is surplus capacity in the engineering sector, with 8,44,328 seats remaining vacant in 2014-15."[197] The surplus capacity does not mean that the competition to get into a good engineering college has become any easier.

What makes the situation even more difficult is the fact that the information technology companies have gone on record to say that they are looking to further automate their workflow. And this is likely to impact the prospects of entry-level engineering graduates.[198]

Jobs in information technology companies are the first choice of most engineering graduates. This comes from the great Indian fascination for office jobs. The information technology companies end up recruiting the best engineers of the lot, leaving very little for other companies. Take the case of the construction companies, which are always looking for good civil engineers. A bulk of the good civil engineers prefer information technology jobs and end up joining these companies, making things difficult for companies into construction as well as other businesses.

As AM Naik, the Group Executive Chairman of the engineering and construction firm Larsen and Toubro put it in a 2007 interview: "My complaint is that these companies [the information technology and outsourcing companies] sign up civil engineers, mechanical engineers, electrical engineers."[199] Hence, the information technology companies recruit the cream among the engineers who graduate. This creates a

huge headache for companies which need engineers for their core skills. The trouble is that an IT job shouldn't be as coveted as it used to be earlier, but that is something that hasn't really changed.

Furthermore, the skillsets of a large section of the engineers who do not make it into IT companies remain shaky at best. As Landsburg writes: "In order for one activity to make you happier than another, you must be unusual in some way."[200] This is clearly not the case with most engineering graduates being produced in India.

****

If you are the kind who reads the inside pages of newspapers carefully, you will find that every few months, a news item which talks about engineers and MBA-degree holders applying for the posts of peons and sweepers in the government appears. Here are a few examples.

For a requirement of 368 posts of Grade IV staff (peons) at the State Secretariat, the Uttar Pradesh government received 23.3 lakh applications. These included around 250 PhDs, 25,000 post-graduates and 1.5 lakh graduates. The applicants included engineers as well as MBAs. In Chhattisgarh, 75,000 applications were received for 30 posts for peons in the Directorate of Economics and Statistics of the state of Chhattisgarh. The applicants included post-graduates in both the arts and the sciences and engineers as well. The municipality in Amroha in Uttar Pradesh advertised for 114 posts for *safai karmacharis*, or sweepers. They received 19,000 applications. Many of the applicants were engineers and MBAs.

These are just a few examples of what seems to have become a regular phenomenon across large parts of India. The headlines of such newsreports normally express surprise at engineers and MBAs wanting to become peons and sweepers.

Nevertheless, there is a clear explanation for this. Given the skillsets that these individuals possess, the kind of money they would make while working at the lowest level of the government is much more than what they would earn otherwise.

The average daily earnings of a casual worker in rural areas in 2011-2012 was Rs. 138. In urban areas, it was Rs. 173. A regular worker made Rs. 298 in rural areas and Rs. 445 in urban areas. Now

compare this with a worker of a CPSE, who made Rs. 2,005 per day, apart from having a secure job and several other benefits.[201] This basically means that a casual worker working in rural areas made around 6.9 per cent per day of what the worker of a CPSE made in 2011-2012.

Of course, all state governments do not pay as much as the CPSEs do. Nevertheless, the differential is high enough and pushes even engineers, MBAs, PhDs, graduates and post-graduates towards low-level government jobs. As the Report of the Seventh Pay Commission, released in November 2015, points out: "To obtain a comparative picture of the salaries paid by the government with that in the private sector enterprises, the Commission engaged the Indian Institute of Management, Ahmedabad, to conduct a study. According to the study, the total [monthly] emoluments of a General Helper, who is the lowest ranked employee in the government, is Rs. 22,579, [which is] more than two times the emoluments of a General Helper in the private sector organisations surveyed, at Rs. 8,000-9,500."

Hence, the IIM Ahmedabad study, "on comparing job families between the government and [the] private/public sector, has brought out the fact that… at lower levels, salaries are much lower in the private sector as compared to government jobs".

This abundantly shows that there is an economic incentive for even the educated lot to apply for low-level government jobs. And this is just the official bit. The money earned through corruption is over and above this.

The broader point being made is that we are producing too many engineers, graduates and MBAs. The number of seats in higher education has jumped up dramatically over the last few years, from 1.1 million (11 lakh) in 2008 to 2.4 million (24 lakh) in 2012.[202]

The number of MBAs between 2008 and 2012 has also jumped up, to 4 lakh, from the earlier 1 lakh. Also, the quality of many of these engineers and MBAs is not up to the mark. As Tilotia writes: "India faces a unique situation where some institutes (IITs, IIMs, etc.) are intensely contested while a large number of the recently opened institutes struggle to fill seats…. With most of the 3 million (30 lakh) people wanting to pursue higher education now having an opportunity to do so, the big question that should… be asked… [is]: Are all these trained personnel required? Our analysis seems to

suggest that India may be over-educating its people relative to the current and at least the medium-term forecast requirement of the economy."

Also, more importantly, the skillsets of those pursuing higher education continue to remain shaky. This is not the best news for a programme like *Make in India*, which was one of the first policy initiatives that Narendra Modi unveiled after taking over as Prime Minister.

---

[x] It has now been divided into the states of Telangana and Andhra Pradesh.

6.FROM *SON OF INDIA* TO *MAKE IN INDIA*

Naya hai zamana, nayi hai dagar,
Desh ko banaoonga machino ka nagar.

– SHAKEEL BADAYUNI

More than two decades ago, in 1992, Bruce Springsteen, the man they also call 'The Boss', sang a song called *57 Channels* (*And Nothin' On*). Ironically, 1992 was also around the time when Cable TV first started to spread across India. It was in 1992 that I first heard the Springsteen song on MTV and wondered what he really meant by it.

I was about to turn fifteen, and had lived in an India which had had just one TV channel—the government-owned Doordarshan. The song made me wonder how more TV channels could be a bad thing. We were coming out of an India which had just one television channel, and we thought that more TV channels would be better than just one. It was an era when the choice of watching TV was limited to that single channel. Okay, there was DD Metro as well, but only in the bigger cities.

But now, around a quarter century later, I can safely say that I am bored with too much TV. Monopoly was when Delhi Doordarshan used to broadcast *Chitrahaar* twice a week at 8 pm on Wednesdays and Fridays. (Large parts of the country got to watch *Chitrahaar* just once a week on Wednesdays. Growing up in Ranchi, where Delhi Doordarshan was broadcast, we were among the lucky ones.)

For the uninitiated, *Chitrahaar* was a 30-minute programme on Doordarshan that played Hindi film songs. I used to look forward to it and had great fun even if *Nanha munha raahi hoon / Desh ka sipahi hoon*, from the movie *Son of India* and written by Shakeel Badayuni, was played for the umpteenth time. Loosely translated, the song talked about a young boy who thought he was also a soldier for his country.

The great filmmaker Mehboob Khan's last film release was *Son of India*. The movie was released in 1962, and Khan died in 1964. The movie is now more or less forgotten, except for the song mentioned above. The song was a regular feature during the propaganda-driven days, when Doordarshan was the only TV channel in town and

Chitrahaar one of the few entertaining shows that one could watch during the course of the week.

The song was shown regularly on *Chitrahaar*, and given that, perhaps a whole generation grew up listening to it. One of the lines in the song is "*Naya hai zamana, nayi hai dagar / Desh ko banaoonga machino ka nagar*". Loosely translated, this means "in this new world, we will make India a nation of machines and factories".

Fifty-two years after the 1962 release of *Son of India*, Narendra Modi was elected as the Prime Minister of India in May 2014. Modi gave the call of *Make in India* in September 2014, echoing sentiments of the *Nanha munna rahi hoon* song. The *Make in India* website, when it was first launched, defined it as "a major new national programme designed to transform India into a global manufacturing hub". (I can't find this line on the website anymore, but I clearly remember writing about it.) Satish Y Deodhar of IIM Ahmedabad also mentions this in a February 2015 working paper, where he writes that the *Make in India* mantra gives an impression that "it is an invitation only to foreign firms to produce in India".[203]

The *Make in India* plan specifically aims at creating 100 million (or 10 crore) jobs by 2022.[204] Over and above this, it seeks to increase the share of manufacturing in the Indian economy to 25 per cent of the GDP by 2025.[205] If this is to be achieved, the manufacturing sector will have to grow by 12-14 per cent per year.

The *Make in India* programme specifically hopes to achieve skill enhancement of the Indian workforce, which will then feed into job creation. As of now, there is a huge skill gap, both in terms of quality and quantity of the workforce. Only 6-7 per cent of the Indian workforce has received some form of vocational training, and hence, this needs to be taken up with the utmost urgency. Apart from the new individuals joining the workforce needing skill training, even the existing workforce would need specific skill training (or retraining, for that matter).[206]

The one good thing here is that the government has realised that it can't go about doing this on its own and has started involving the private sector in a big way. Also, one challenge the government (and even the private sector) is likely to encounter very quickly as it tries to scale up is the shortage of individuals who can impart skill training. To get around this, to some extent, the talent and experience of the

retired personnel of the army as well as the railways could be used. Between them, the army and the railways have many personnel who introduce, maintain and upgrade electrical and mechanical equipment of various kinds for their own use.[207]

Over 60 per cent of India's population is in the working age group of 15-60 years. The country has the largest young population in the world. Indeed, this is a huge challenge. The National Manufacturing Policy of 2011 estimates that this would entail the creation of 220 million (22 crore) jobs by 2025 in order to cash in on the demographic dividend. As the Policy points out: "The manufacturing sector would have to be the bulwark of this employment creation initiative. Every job created in manufacturing has a multiplier effect of creating two to three additional jobs in related activities."

The multiplier effect of manufacturing would lead to more jobs in the services sector. Take the case of more cars being made and sold. Job growth would also happen in the associated areas of manning petrol pumps and maintaining and repairing vehicles. It would also lead to an increase in the demand for drivers. In fact, this point is made by RC Bhargava, the Chairman of Maruti Suzuki. Bhargava points out that every third car bought in India is not driven by the owner, but by a hired driver.[208]

Data from the Society of Indian Automobile Manufacturers (SIAM) points out that around 2.8 million (28 lakh) cars were sold in India in 2015-2016. If every third car is being driven by a driver, as Bhargava claims, then that means a few lakh new jobs for drivers having been created just in 2015-2016 alone, depending on how many individuals were buying a car for the first time and how many were upgrading. And a few lakh jobs a year is a substantial number. Of course, with the sad state of the roads all across the country, all these new cars also mean that it will take us more time to get anywhere, with the overall traffic speed slowing down even further.

The broader point is that the setting up of new factories will lead to an increase in jobs in the services sector as well. Jamshyd Godrej, Chairman and Managing Director of Godrej & Boyce, the diversified engineering company, makes a similar point. Godrej recalls a time when most of his company's employees used to work in the factory. Now, the number of employees working outside the factory is four to five times the number of employees working in the factory.[209]

The moral of the story is that success in manufacturing also leads to employment growth in the services sector, where incomes are significantly higher than those in agriculture. In this scenario, it is important that the government realise that the success of *Make in India* should not depend on just the number of manufacturing jobs it ends up creating.

In 1980, more than three and a half decades ago, the output per worker in industry was three times that of one into agriculture. In the case of services, it was four times. By 2011, the output of a worker in industry was four times that of one in agriculture. In services, it was seven times.[210]

Hence, if the economy has to grow, jobs need to be created in other sectors, and people need to be moved away from agriculture. Also, it is important that many of these jobs be for low-skilled labour. This is a necessity if "unpleasant, even explosive, outcomes are to be avoided".[211]

****

The *Make in India* programme aims at government action facilitating foreign direct investment into various sectors. In fact, the Foreign Direct Investment (FDI) coming into India has been very robust. In 2015-2016, it stood at $55.5 billion, the highest that it has ever been during the course of a financial year. It had stood at $36 billion during 2013-2014. Over and above this, the government has plans to build smart cities as well as develop industrial corridors.

It had identified 25 sectors which it plans to promote. These include employment-intensive industries, like garments and textiles, leather and footwear, food processing, and gems and jewellery. It also includes strategic industries, like shipping, renewable energy, and aerospace and defence equipment.[212]

Furthermore, the average small and medium enterprises in India continue to remain small. The *Make in India* programme wants to facilitate an environment in which these enterprises grow bigger than they currently are and create jobs in the process. The small and medium enterprises contribute around 45 per cent of the manufacturing output as well as 40 per cent of the exports. The sector also offers jobs across diverse geographies.[213]

In fact, a close reading of the National Manufacturing Policy of

2011 tells us that *Make in India* was largely inspired by it. The question to ask here is: What went wrong during the intervening period between 1962, when Shakeel Badayuni wrote the *Nanha munha raahi hoon* song, and 2014, when the *Make in India* programme was announced?

Why are we *still* talking about aiming to build factories and a vibrant manufacturing sector more than half a century later? Also, wasn't Jawaharlal Nehru's attempt to build public sector enterprises also a version of *Make in India*? It was, and it failed. In the process, the country ended up spending too much money on public sector enterprises and too little on primary education, as we have already seen.

While size has helped the Indian democracy, it has also led to many policy errors which shouldn't have been made. As TN Ninan points out in *The Turn of the Tortoise*: "Successful small countries find it easy, indeed necessary, to focus on export markets because their internal markets are too small to support scale production. But India is big enough to offer the potential of a large domestic market; inevitably, that became the focus of policy."[214]

The countries of South-East Asia also started with import substitution (or producing only for the domestic market), but quickly shifted their focus towards exports. India continued to favour import substitution for much longer, and this has had its repercussions. When companies produce for the global market, they need to compete with the best in the world. This automatically leads to a situation wherein the products which a company produces need to be globally competitive.

On the other hand, when import substitution is the norm and companies need to produce just for the internal market, almost anything goes. What did not help was that the licence raj, which was unleashed by Indira Gandhi (another example of Big Government), essentially ensured that there was next to no competition in many product markets. Automobiles are an excellent example. For a very long time, consumers had access to only two brands—the Ambassador, manufactured by the Birlas at Uttarpara near Kolkata, and the Premier Padmini, by the Walchand group at Kurla in Mumbai.

Import substitution as an economic strategy also came from the

fact that India was coming out of more than two hundred years of British rule and so wanted to be self-sufficient. This point becomes clear from a paragraph from Jawaharlal Nehru's book *The Discovery of India*: "The objective for the country as a whole was the attainment, as far as possible, of national self-sufficiency. International trade was certainly not excluded, but we were anxious to avoid being drawn into the whirlpool of economic imperialism. We wanted neither to be victims of an imperialist power nor to develop such tendencies ourselves. The first charge on the country's produce should be to meet the domestic needs of food, raw materials, and manufactured products. Surplus production would not be dumped abroad but be used for exchange of such commodities as we might require. To base our national economy on export markets might lead to conflicts with other nations and to sudden upsets when those markets were closed to us." [215]

With such views held by the first prime minister of India, it wasn't surprising that India stuck to an import substitution strategy even later, when it wasn't fashionable to do so. It is important to point out here that, even though Nehru was enamoured with socialism, he did not want to emulate the USSR's bloody revolution and the civil war that followed in the 1920s. Nehru was a Fabian socialist. As Satish Y Deodhar writes in a research paper titled 'Make in India—Rechanting the Mantra with a Difference': "Like the Roman general Fabius, who won battles by slowly tiring his opponents, Fabian socialists believed in slow changes." They did not believe in bloody revolutions.[216]

At the same time, as mentioned earlier, it is fashionable to blame Nehru for much of what followed during the period when Indira Gandhi, Nehru's daughter, governed India. When Indira Gandhi was Prime Minister (through much of the period between 1967 and 1984, except for a brief period between 1977 and 1979, when the Janata Party was in power), the government attitude was exceptionally anti-business. But how can Nehru be blamed for that?

As the economist Arvind Panagariya, the current Vice-Chairman of NITI Aayog, writes in his 2008 book *India—The Emerging Giant*:[217]

> The key element in Nehru's thinking on trade policy was that India needed to be independent of the world markets. He saw this independence as essential to maintaining political independence…. While Nehru did want domestic production to eventually replace imports, there are no statements in his writings or speeches to suggest that he wanted to achieve this by erecting import barriers.

Due to these reasons, India kept concentrating on import substitution for an inordinately long period of time and, in the process, never developed the ability to produce quality products that were needed to compete in the international market. Thus, the country never got an export strategy going.

In *1991—How PV Narasimha Rao Made History*, Sanjaya Baru talks about the industrial policies of Jawaharlal Nehru and his daughter Indira Gandhi. As he writes:[218]

> These were policies which prevented Indian firms from becoming globally competitive, which kept foreign investment away in the name of promoting domestic business, which required entrepreneurs taking risks to first secure [the] permission of a joint secretary in the Ministry of Industry, with the official concerned having no clue about the risks involved or the options available; which told firms where to invest, how to invest, how much to invest, etc.

With such a level of central planning being the order of the day, it isn't surprising that quality products and Indian businesses did not go together. This inability to produce quality products set us back in the export-manufacturing race. And we are still trying to get the manufacturing revolution going!

****

In May 2015, *The Times of India* published a very interesting newsreport. It pointed out that over 60 per cent of the recently registered products with the Bureau of Indian Standards (BIS) were Made in China.[219] This was basically seen as an effort on the part of Chinese manufacturers to conform to Indian standards.

These include electronic products like mobile phones, printers, power adapters, notebooks, tablets, and so on. What this tells us clearly is that a vast majority of the electronic products that we buy in India are not Made in India, but Made in China. In fact, a number of successful Indian mobile phone brands are just brands which directly buy the mobile phones that they sell from factories in China.

Interestingly, the last time I bought a television set a few years back, it came with a weird-looking plug, something that I had never seen before. It wouldn't fit into the electrical socket at home. It took a helpful neighbour to solve the problem. He told me that I would need a converter to fit the plug into the socket. The converter cost me Rs. 25 and left me wondering why a company which sold a product worth Rs. 15,000 would inconvenience its customers for something worth as low as Rs. 25.

When I bought a smart phone a couple of years later, a similar experience awaited me. But this time around, I was prepared, and as soon as the smart phone was delivered at home (I had ordered it online), I went out and bought a converter, which then cost Rs. 20.

As you must have figured out by now, dear reader, both the products were Made in China. Not only are technology products which are Made in China flooding the Indian market, but there are other products as well. From electricity bulbs to thermometers, to Ganesha and Lakshmi idols for Diwali, to the different colours used for playing Holi and even Rakhis, all are now Made in China.

In fact, even *aggarbattis* (incense sticks) are now Made in Vietnam.[220] This has been happening for some time now and is a worrying trend indeed.

There are essentially three ways in which a country escapes underdevelopment—geology, geography and jeans (a euphemism for low-skilled manufacturing). Geology essentially refers to countries exploiting their natural resources (endowed by geology) in order to improve their standard of living. Canada and Australia are two excellent examples of this phenomenon. In the recent past, countries like Chile, Brazil, Botswana, etc. provide some more good examples.[221]

Geography essentially refers to countries exploiting their natural beauty to develop tourism and, in the process, improve their standard of living. Island countries like Barbados (and other countries in the Caribbean) and Mauritius are excellent examples of this. In fact, within India, the state of Goa, which has the highest per capita income from among all states, is a good example of the same.

Then comes 'jeans', or essentially low-skilled manufacturing. Countries in South-East Asia (Malaysia, Thailand, Indonesia, etc.), China and South Korea initially relied on low-skill manufacturing (typically textiles and clothing) to improve their per capita income. As the Economic Survey of 2015-2016 points out: "Later on, they diversified into more sophisticated manufacturing, but 'jeans' offered the vehicle for prosperity early on. No country has escaped from underdevelopment using relatively skill-intensive activities as the launching pad for sustained growth, as India seems to be attempting."

In fact, take the case of China. In 1980, China's export share in the

world market for clothing and footwear was 1.3 per cent. India's share was greater than that of China, at 1.4 per cent. By 2007, the Chinese share had risen to 37.6 per cent. The Indian share had gone up to just 3.2 per cent. This has primarily happened because of India's labour laws and due to several other factors (which we shall see later in the chapter) which do not encourage labour-intensive manufacturing. This has led to a situation wherein the Indian manufacturing sector has not been integrated into global supply chains.[222]

As the World Trade Report for 2013 points out:

> A central feature of this… age of globalisation is the rise of multinational corporations and the explosion of foreign direct investment (FDI)…. By 2009, it was estimated that there were 82,000 multinationals in operation, controlling more than 810,000 subsidiaries worldwide. Upwards of two-thirds of world trade now takes place within multinational companies or their suppliers – underlining the growing importance of global supply chains.

This is something that India has clearly missed out on.

One of the reasons India has missed out on being a part of global supply chain networks is because there are very few firms that carry out labour-intensive manufacturing. And this has happened because the country has never got around to encouraging labour-intensive manufacturing, which can give firms economies of scale in areas like garment manufacturing, where there is cut-throat competition from other countries.

Encouraging low-skilled manufacturing to create jobs is a rather obvious insight which Indian politicians and policymakers have not understood over the years. The economic development strategy of a nation needs to align itself with its natural competitive advantage, which, in the Indian case, is the large pool of unskilled labour which is already available and, at the same time, is continually entering the workforce all the time.

In fact, even when the *Make in India* programme was first launched, the bureaucrats responsible for it were talking about setting up advanced factories in areas like solar-powered appliances and military weapons. This needs highly skilled people, which India does not have. What the country needs are factories which manufacture toys and textiles.[223] Thankfully, the Modi government has started to understand this, and in June 2016, it carried out some labour law reforms in the textiles sector (which shall be discussed in Chapter 7).

The point is that no country has gone from developing to

developed without the expansion and success of its manufacturing sector. As the Cambridge University economist Ha-Joon Chang writes in *Bad Samaritans—The Guilty Secrets of Rich Nations and the Threat to Global Prosperity*: "History has repeatedly shown that the single most important thing that distinguishes rich countries from poor ones is basically their higher capabilities in manufacturing, where productivity is generally higher, and more importantly, where productivity tends to grow faster than [in] agriculture and services."[224]

The Indian manufacturing sector cannot flourish with the most basic of products being Made in China. For a while, there was great hope that India did not need to go through a manufacturing revolution to pull its citizens out of poverty and that the information technology-led services revolution would perform that miracle.

But it can safely be said that that hasn't turned out to be the case. The simple reason for this lies in the fact that information technology companies employ highly skilled individuals. The net hiring in the information technology sector has remained stagnant, at 2.5 lakh individuals per year, for the past few years.[225]

In fact, if we ignore the numbers hired by the Business Process Outsourcing (BPO) sector, the number of individuals recruited by the information technology companies during the course of the financial year ending on March 31, 2015 stood at 2.1 lakh.[226] Hence, the point is that when close to a million people are entering the workforce every month, a sector hiring 2-2.5 lakh individuals during the course of a year cannot solve India's job problem.

What has not helped is that similar booms have occurred in neighbouring countries like Sri Lanka and Pakistan. The Philippines has a booming call centre industry, employing 3,50,000 individuals, which competes with Indian companies.[227]

There are two points here. One is that India has competition in the information technology services space from neighbouring countries. And, more importantly, the services sector cannot create enough jobs to absorb both the new workforce and, at the same time, the workforce that needs to be moved from agriculture to other areas. The output of the information technology sector amounts to a significant 2.5 per cent of the Indian GDP. Nevertheless, it doesn't create many jobs. Over the last ten years, the information technology sector has

created around 15 lakh jobs in India. If we continue to be optimistic about the sector, it will perhaps create another 15 lakh jobs over the present decade. And that isn't enough by any stretch of the imagination.[228]

Also, the information technology sector employs skilled individuals, i.e., graduates, engineers, MBAs, and so on. The information technology companies do not directly create jobs for low-skilled people, who have only primary education or, at best, secondary education. Of course, they do create jobs indirectly. Whenever an information technology company sets up a new office, it creates all kinds of jobs, from construction jobs to drivers, to cleaners, to cooks and maids, and so on. But that also does not help beyond a point.

This is true about other highly productive sectors within the broader services sector as well. In fact, firms operating in finance, business, telecommunication, knowledge and technology form around 25.3 per cent of the GDP. Yet they make up for only 2.2 per cent of the total employment.[229]

What India needs are industrial blue-collar jobs, where most of the training is received on the job.[230] In fact, it is only this which can help create jobs for the one million Indians who are entering the workforce every month. In Chapter 4, we saw that there are multiple estimates which suggest that around one million Indians are entering the workforce every year and are likely to continue doing so until 2030.

Nevertheless, it needs to be pointed out here that there are certain assumptions being made while arriving at the one million figure and those assumptions could turn out to be wrong. Data from the National Sample Survey Organisation (NSSO) suggests that India has a labour force of 48.4 crore individuals. This forms 40 per cent of the population (assuming a population of 121 crore, as per the 2011 census). This ratio is referred to as the labour force participation rate of the country.[231]

The trouble is that, at 40 per cent, the ratio is too low. The main reason for this is that the labour force participation ratio is typically calculated for the total number of people in the 15-59 years of age range. India has 73 crore people in this age range. Taking this into account, the labour force participation rate of India comes to 66.3 per cent (48.4 crore expressed as a percentage of 73 crore). This basically means that, of the 73 crore people in the age range of 15-59 years,

48.4 crore are actively seeking employment.[232]

Furthermore, India's workforce is predominately male. The labour force participation rate of males stands at 94 per cent and that of females at 37 per cent.[233] What is interesting is that the female labour participation rate has fallen in the recent past. Experts have been baffled by this and have attributed it to women spending more time on education and skill development, faulty data and the minimum wage guarantee programme (the Mahatma Gandhi National Rural Employment Guarantee Scheme) launched by the Congress-led United Progressive Alliance government.[234]

The point is that, at 37 per cent, the female labour participation rate is way short of that of China, which is at 64 per cent.[xi] Nevertheless, as has been observed the world over, as fertility rates continue to fall (i.e., fewer babies born per woman), more and more women enter the workforce. South Korea is a very good example of this. As fertility rates fell over the decades, a greater proportion of women entered the workforce.[235]

The point being that if the Indian female labour force participation rate starts to go up in the years to come, then the assumption of one million Indians entering the workforce every month might turn out to be an underestimate. As Akhilesh Tilotia writes in *The Making of India*: "If… a larger percentage of women in India aspire to work, it could increase… the number of people looking for work every year to around 20-22 million."[236]

The economist Vijay Joshi refers to the female labour force participation rate as 'the chief joker in the pack'.[237] If the female labour force participation rate starts to go up, as it very well should, then India might end up with an even bigger problem on its hands.

****

In 1987-1988, the share of manufacturing (which is a part of industry) in the overall Indian GDP crossed 15 per cent for the first time. It was at 15.01 per cent. The share of manufacturing in the GDP crossed 16 per cent in the mid-1990s. It hit a high of 16.6 per cent in 1996-1997. It fell below 16 per cent after this, and crossed 16 per cent again in the 2000s, only to fall again. By 2013-2014, the share of manufacturing in the Indian GDP was back to below 15 per cent. It was at 14.94 per cent.

In January 2015, India moved towards a new method to calculate its GDP. As per this method, the share of manufacturing in Indian GDP had jumped to around 18 per cent between 2011-2012 and 2013-2014. For 2014-2015 and 2015-2016, the figures were a little lower, at 17.1 per cent and 17.5 per cent, respectively.

Many doubts have been raised about this new method of calculating the Indian GDP. The suggested increase in the share of manufacturing in the GDP is not met with by much evidence on the ground. A detailed discussion of this issue is beyond the scope of this book. Hence, I will work with the assumption that manufacturing forms around 15 to 16 per cent of the Indian GDP and that is where it has been for nearly the last three decades. Now compare this with several countries in Asia, where manufacturing accounts for more than 20 per cent of the GDP. In Thailand, it is at 34 per cent. In China, it is at 32 per cent. In Malaysia, Indonesia and the Philippines, it is at 24 per cent, 24 per cent and 31 per cent, respectively.[238]

Hence, the Indian share in global manufacturing has barely moved over the last few decades. In 1993, India had 0.9 per cent of the global manufacturing. In comparison, China had a 3.1 per cent share. By 2009, the Indian share in global manufacturing had increased a little to 2.2 per cent. By contrast, the Chinese share had jumped to 17.3 per cent. By 2013, the Indian share had dropped to 2 per cent of the global manufacturing, whereas the Chinese share had jumped up to 24.1 per cent.[239]

Hence, over the past 23 years, China has really managed to capture (for the lack of a better word) close to one-fourth of the global manufacturing space, while India has moved at a snail's pace. This can also be made out from the fact that India's share of global merchandise exports had moved from 0.5 per cent to 1.7 per cent between 1993 and 2013. During the same period, China's share had jumped from 2.4 per cent to 11.5 per cent.[240]

A study carried out by the Emerging Advisors' Group, a Hong Kong-based research firm, found that sustained growth in the export of manufactured products was the single most powerful driver of economic booms. The export of simple manufactured products (or jeans, as we saw earlier) increases the income as well as the consumption within the country. At the same time, it helps the country earn precious foreign exchange, which can be used to import the machinery and materials required to improve the factories which

make goods which could be exported.[241]

Typically, a country first goes through a manufacturing revolution, and only then does the services revolution kick in. The way it works is that once factories pop up around cities, services spring up to cater to the individuals working in these factories. As the middle class grows, restaurants and insurance companies emerge.[242]

This is typically how it is supposed to work. The share of industry in the economic activity of a country first goes up and then comes down as the services take over. As the Economic Survey of 2015-2016 points out: "It is a stylised fact that the process of development includes stages of industrialisation followed by de-industrialisation: a country first experiences a rising share of resources – especially labour – devoted to the industrial sector, after which the services sector becomes more important, so that the share of employment in the industrial sector declines from its peak."

India, on the other hand, has gone precisely the other way. In the mid-1950s, six decades ago, agriculture formed nearly half of the Indian GDP. Industry formed around 18.1 per cent of the GDP, manufacturing (a part of industry) formed around 10 per cent of the GDP, and services, 29.6 per cent. As the share of agriculture in the Indian GDP fell, it was taken up more or less equally between industry and services. By 1980-1981, agriculture was down to 35.7 per cent of the GDP. The share of industry in the GDP had increased to 25.7 per cent, whereas that of services had increased to 37.7 per cent. Hence, the fall in agriculture's share in the GDP was more or less split between industry and the services. The share of manufacturing had jumped to around 14 per cent by 1980-1981.

After 1980-1981, things started to change, and the services started to take over. In the 1990s, the exports of information technology companies (which show up under the services exports) added to this trend. By 2013-2014, the share of agriculture in the economy had fallen to 13.9 per cent. Industry's share was at 26.1 per cent, in comparison to 25.7 per cent in 1980-1981. The share of manufacturing was at 14.9 per cent. Hence, the share of agriculture in the overall economy has fallen majorly since 1980, whereas the share of industry as well as manufacturing has more or less been flat. At the same time, services in 2013-2014 formed around 59.9 per cent of the economy.

So, in this sense, India has been unique. The Indian experience has been in line with that of many sub-Saharan countries.[243] Indeed, this is a worrying trend. In fact, manufacturing as a share of the GDP peaked in 1996-1997 at 16.6 per cent. This is also reflected in the state-level registered manufacturing data. Registered manufacturing is essentially defined as factories which have more than ten workers.

States are seeing what the economists Amrit Amirapu and Arvind Subramanian call *premature non-industrialisation*.[244] Only in one Indian state has the registered manufacturing share of the state's GDP crossed the 20 per cent level. This was Gujarat in 2011. As Amirapu and Subramanian point out: "Gujarat has been the only state in which registered manufacturing as a share of [the] GDP surpassed twenty per cent and came anywhere close to [the] levels achieved by the major manufacturing successes in East Asia."[245]

In fact, other states like Maharashtra and Tamil Nadu, which are known to be manufacturing heavyweights, achieved their peaks in 1986 and 1990, respectively. At its peak, registered manufacturing in Maharashtra was at 18.9 per cent of the state's GDP. In the case of Tamil Nadu, it was at 18.1 per cent.[246]

Registered manufacturing in Haryana peaked in 2003 at 17.3 per cent. For West Bengal, it peaked at 12.3 per cent in 1982. Among the recent peaks are Himachal Pradesh, at 16.4 per cent in 2011, and Madhya Pradesh, at 12.5 per cent in 2008. Hence, registered manufacturing as a share of the state GDP has been going down for most states (with the exception of Gujarat and Himachal Pradesh), with the peak having been reached many years ago.[247]

Let's take the example of Uttar Pradesh, India's most populous state. As the Economic Survey of 2015-2016 points out: "It reached its peak share of manufacturing in output at 10 per cent of [the] GDP in 1996 at a per capita state domestic product of about $1,200 (measured in 2005 purchasing-power parity dollars). A country like Indonesia attained a manufacturing peak share of 29 per cent at a per capita GDP of $5,800. Brazil attained its peak share of 31 per cent at a per capita GDP of $7,100. So, Uttar Pradesh's maximum level of industrialisation was about onethird that in Brazil and Indonesia; and the decline began at 15-20 per cent of the income levels of these countries."

And unless a state as big as Uttar Pradesh sees some serious

manufacturing activity, how can India hope to create any sort of equitable economic growth which is spread across a large section of its population?

A similar trend is observed when it comes to the total employment in registered manufacturing firms. In Maharashtra and West Bengal, the employment peaked in 1984 at 4.8 per cent and 4.7 per cent, respectively, of the total employment. In Gujarat, it peaked at 5.4 per cent of the total employment in 1984. There are some states, like Tamil Nadu, Haryana and Punjab, where the employment in registered manufacturing peaked in 2010 at 6.2 per cent, 6.1 per cent and 5.4 per cent, respectively.[248]

As the Economic Survey of 2014-2015 points out: "Most states have *not* [emphasis original] been experiencing secular[xii] growth in employment shares over time (the only exceptions are Himachal Pradesh, Tamil Nadu, Haryana and – possibly – Karnataka). Many of the states that… [did] exhibit [their] peak years in 2010 (such as Andhra Pradesh, Rajasthan and Orissa) seem to have employment shares that have been mostly flat, reflecting neither relative growth nor decline."

****

I have happily been using the word 'services' throughout this chapter while, nevertheless, the question remains: What does the word actually mean? The services sector includes a whole host of firms operating in different areas like trade, hotels and restaurants, transport, storage and communications, financial services and insurance, real estate and business services, public administration, defence and construction.

As can be seen, there is a whole host of different firms which come under the services sector. The services sector formed 59.9 per cent of the Indian economy in 2013-2014. This was as per the old method of calculating the GDP. As per the new method of calculating the GDP, services formed around 50.7 per cent of the Indian economy in 2013-2014.

While we can argue on whether services form 50 per cent or 60 per cent of the Indian economy, that is really not important when it comes to the basic idea that I am trying to explore in this book.

The pertinent question here is: Given that India has missed out on a manufacturing revolution, can services help create the low-skilled jobs that the country actually needs? Let's look at some data offered by the economists Amirapu and Subramanian. In 1984-1985, services accounted for around 39 per cent of the Indian economy. At the same time, they had a 20.1 per cent share in the employment. By 2010-2011, services accounted for 57.5 per cent of the Indian economy. At the same time, they had a 21.9 per cent share in the overall employment.[249]

Within services, there are sectors which have had a higher relative employment growth than others. In 1984, the real estate and business services had a 0.2 per cent share in the employment. By 2010, this had jumped to 1.1 per cent. In the case of construction, the figure had jumped from 3.1 per cent to 8 per cent. On the whole, even though the services sector now forms more than half of the economy, its share in the employment is only 21.9 per cent. [250]

At the same time, as far as creating jobs is concerned, the services sector has done a much better job of it than registered manufacturing. Registered manufacturing formed 2.7 per cent of the employment in 1984. By 2010, this had come down to 2.6 per cent. As the Economic Survey of 2015-2016 points out:

> Aggregate services employment grew faster than that in registered manufacturing, and a number of service subsectors—transport, real estate and construction—registered substantially faster employment growth. In other words, services are becoming an ever more important source of wealth, and while they have not delivered rapid employment growth, a number of service sub sectors have generated more rapid employment growth than manufacturing.

While services are creating more jobs than registered manufacturing, the question is whether the firms operating in the sector can create enough jobs for India's low-skilled workforce. Before I try to answer this question, let's take a look at the kind of workers that the registered manufacturing sector in India employs.

Registered manufacturing in India, the way it has evolved, is skilled-labour intensive. Around 43.2 per cent of the employees in registered manufacturing have at least had secondary education (i.e., they have passed Standard X). By comparison, only 13.9 per cent of the individuals working in agriculture have had at least secondary education. At the same time, if one looks at manufacturing as a whole (which includes unregistered manufacturing as well, i.e., firms with up to 10 employees), the proportion of employees with at least

secondary education stands at 24.8 per cent. This basically means that the proportion of employees with secondary education in unregistered manufacturing is considerably lower in comparison to that in registered manufacturing, but higher than that in agriculture.[251]

As Amirapu and Subramanian put it: "In some ways, this should not be surprising. High labour productivity in this sector is at least in part a consequence of higher skills in the work force…. The skill intensity of the sector is not quite aligned with India's comparative advantage." India's comparative advantage is the abundance of low-skilled labour.

How do things look for the services sector? Around 47.8 per cent of those employed in the services sector have at least had secondary education. This is higher than those in registered manufacturing. This is simply because of the fact that many areas within the services sector need people with high skills. These include the financial services and insurance (83.6 per cent with at least secondary education), real estate and business services (77.5 per cent), education (88.8 per cent), as well as health and social work (76.7 per cent). There are other sectors, like construction, transportation and communications, and wholesale and retail trade, where the education levels of the employees are a lot lower. In these respective sectors, only 14.4 per cent, 33 per cent and 34.6 per cent of the employees have had secondary education.[252]

As Amirapu and Subramanian point out:

> A large number of service subsectors – including 1) Banking and Insurance, 2) Real Estate and Business Services, 3) Public Administration, 4) Education, and 5) Health and Social Services – have significantly higher educational attainment (90 per cent or more of [the] workers have [had] at least primary education) than registered manufacturing. What this implies is that many service subsectors (precisely the high-productivity, high-growth subsectors, for the most part) have a limited capacity to make use of India's most abundant resource, unskilled labour. This may explain why the share of employment from services (especially the high-growth service subsectors) has risen so modestly, even while the share of output from services has grown so substantially.

In fact, even in some low-skilled sectors, the need for high skills seems to be creeping in. Take the case of taxi/auto-rickshaw drivers in Mumbai or any other Indian city. What they needed to know until now was just how to drive. The knowledge of the roads and localities within the city could be picked up on the job. Now, with the launch of taxi aggregator services like Uber and Ola, it is not enough just to know how to drive.

The driver should know how to operate a smart phone. He should

know English, so that he can read the map on the smart phone screen. Furthermore, he should also have some sophistication and be able to call up the customer and talk to him or her. Many taxi/auto-rickshaw drivers do not have these skills. In fact, many drivers who drive for Uber and Ola do not have these skills either.

The larger point being made here is that both registered manufacturing and the services require skilled workers. And this goes against India's basic competitive advantage of having an abundance of unskilled and low-skilled labour. So what is the way out? Should India keep concentrating on the skill-intensive pattern of growth? This would mean that the labour force will have to be much better educated than it is today. As we have seen earlier, the state of India's education system is terrible, and it continues to decline. Hence, even those who have been to school can offer no guarantee of the basic skillsets of reading, writing and the ability to do some basic maths.

Also, education standards cannot be improved overnight, despite the best intentions of any government. The basic problem of teachers not wanting to teach continues to remain. Hence, any concentration on a skill-intensive model of development would mean that one or two generations of people who are currently unskilled will get left behind.[253] This basically means that the disguised unemployment in agriculture will continue to remain high. At the same time, unemployed youth are easy prey for anti-social elements. Finally, no country till date has followed this model to create economic growth and eliminate poverty.

So that leaves us with manufacturing and industry. The problem here is that India has already seen significant levels of de-industrialisation, with the share of manufacturing in many states falling after having achieved a peak. This will not be easy to reverse. Examples of countries which were able to reverse the process of de-industrialisation are few and far between.

****

The manufacturing game to drive economic growth through exports has become increasingly difficult to play over the years. One reason for this is that, since the success of China in the manufacturing game, many other countries, including the likes of Bangladesh and Vietnam, have entered the global manufacturing competition.[254] In fact,

Bangladesh exports more textiles than India does.

Other than increased competition, exports haven't grown at the same pace since 2010 as they had in the past. Between 1995 and 2000, global exports grew by 7 per cent per year. This slowed down to 5 per cent per year between 2000 and 2005. The growth fell further to 3 per cent between 2005 and 2010. The export growth since 2010 (i.e., between 2010 and 2015) has stayed at 3 per cent.[255] One of the reasons is the fact that developed countries have been trying to protect their domestic companies.

The other factor that makes the manufacturing game difficult to play is the increasing amount of automation that is likely to take place in the years to come. Robots are likely to take over jobs at the lower end of the spectrum. HfS Research, a research firm based in the United States, has predicted that, by 2021, India's information technology companies will lose around 6.4 lakh jobs to automation.[256] This is something that high-ranking officials of Indian IT firms have also said.

As Rutger Bergman writes in *Utopia for Realists*: "Scholars at Oxford University estimate that no less than 47 per cent of all American jobs and 54 per cent of those in Europe are at a high risk of being usurped by machines. And not in a hundred years or so, but in the next 20." He then quotes a New York University professor as saying: "The only real difference between enthusiasts and skeptics is a time frame."[257]

In fact, this has already started to play out. In May 2016, the shoemaker Adidas announced that it would start manufacturing shoes in its home country of Germany after nearly two decades. But it shall use robots and not human beings to do the same. The company calls its robot factory the speed factory. A second such factory is being planned in the United States as well.[258] In another similar case, Foxconn, a company which manufactures mobile phones for both Samsung and Apple, is replacing 60,000 workers with robots.[259]

In mid-September 2016, the textile major Raymond said that it was planning to slash 10,000 jobs across its manufacturing centres all across India and replace them with robots and technology. The company currently employs 30,000 employees.[260] Hence, robots are likely to replace one-third of its workforce.

Furthermore, driverless cars have already arrived. As Ruchir Sharma writes in *The Rise and Fall of Nations*: "The most common job

for American men is driving, and one forecast has driverless smart cars and trucks replacing them all by 2020."[261]

And if all this wasn't enough, on October 3, 2016, the World Bank President, Jim Yong Kim, said in a speech: "Research based on World Bank data has predicted that the proportion of jobs threatened by automation in India is 69 per cent, 77 per cent in China and as high as 85 per cent in Ethiopia."[262]

These are just a few examples of the expectation that robots will take over human jobs. As can be seen, this threat looms not just over India but over large parts of the developed as well as developing world.

Indeed, the threat of robots taking over human jobs is nothing new. So what makes the threat this time around so different from the previous ones? As Yuval Noah Harari writes in *Homo Deus—A Brief History of Tomorrow*:[263]

> This is not an entirely new question. Ever since the Industrial Revolution erupted, people feared that mechanisation [which is what robots are after all about] might cause mass unemployment. This never happened, because as old professions became obsolete, new professions evolved, and there was always something humans could do better than machines. Yet this is not a law of nature and nothing guarantees it will continue to be like that in the future.

The question remains: What has changed this time around?

Human beings essentially have two kinds of abilities: a) physical abilities; and b) cognitive abilities, i.e., the ability to think, understand, reason, analyse, etc. As Harari writes: "As long as machines competed with us merely in physical abilities, you could always find cognitive tasks that humans do better. So machines took over purely manual jobs, while humans focused on jobs requiring at least some cognitive skills. Yet what will happen once algorithms outperform us in remembering, analysing and recognising patterns?"[264]

Hence, the robots used until now essentially replaced the physical things that human beings did in factories. The trouble is that now the robots have also started thinking (in the form of algorithms), and hence, many more human jobs are on the line. Harari feels that "as algorithms push humans out of the job market, wealth might become concentrated in the hands of the tiny elite that owns the all-powerful algorithms, creating unprecedented social inequality."[265]

This argument, along with the evidence offered earlier, seems to be pretty convincing, if seen in isolation. But there is a lot more to this than just the evidence that is currently being offered. As Sharma writes: "While the robotics revolution could come faster than most previous technology revolutions, it is likely to be gradual enough to complement rather than destroy [the] human workforce. A huge gap still exists between the size of the world's industrial robot population —about 1.6 million [16 lakh]—and the global industrial labour force of about 320 million [32 crore] humans."[266]

As per the International Federation of Robots, South Korea currently has the highest penetration of robots. The country has 437 robots per 10,000 employees. Japan and Germany come in second and third with 323 robots and 282 robots per 10,000 employees, respectively. China has 14 robots per 10,000 employees. Half of these robots are unintelligent machines currently used in car manufacturing.[267]

The point is that there aren't as many robots going around as there are made out to be. Also, it is worth remembering here that large parts of the Western world and Japan are currently seeing their population decline. China will also soon reach that stage as well. Hence, in that sense, the robots will arrive at the right time, replacing the decline in the labour force. As Daniel Kahneman, the Nobel Prize-winning psychologist (he won the Economics prize), told John Markoff, a journalist who covers science and technology for *The New York Times*: "You just don't get it…. In China, the robots are going to come just in time."[268]

The point is that, when it comes to big predictions, like robots taking over human jobs, there are always a few ifs and buts. The trouble is that these ifs and buts are not being highlighted as much as the core argument of robots taking over human jobs currently is.

Other than these factors, there is a basic law in economics which goes against the entire idea of robots totally destroying human jobs. It's called Say's Law, which I discussed in Chapter 1. It essentially states that the production of goods ensures that the workers and suppliers of these goods are paid enough for them to be able to buy all the other goods that are being produced. As seen earlier, a pithier version of this law is "Supply creates its own demand".

As Bill Bonner writes in *Hormegeddon—How Too Much of a Good*

Thing Leads to Disaster: "[The] French businessman and economist Jean-Baptiste Say discovered that 'products are paid for with products', not merely with money. He meant that you needed to produce things to buy things."[269]

So what does this mean in the context of robots destroying human jobs? If robots destroy too many human jobs, many people won't have a regular income. If these people do not have a regular income, how are they going to buy all the products that robots are going to produce? And if they are not going to buy the products that robots are producing, how are the companies driven by robots going to survive?

This is a basic question that none of the analysts who are predicting doom on the basis of robots taking over human jobs have bothered to ask. For capitalism to survive, it is essential that human beings work and earn an income; only then can they go around buying everything that is being produced.

The basic problem with the robots taking over human jobs argument is best explained through this example. As Bergman writes: "When Henry Ford's grandson [Henry Ford II] gave labour union leader Walter Reuther a tour of the company's new, automated factory, he jokingly asked, 'Walter, how are you going to get those robots to pay your union dues?' Without missing a beat, Reuther answered, 'Henry, how are you going to get them to buy your cars?'"[270]

Also, another point that most analysts seem to miss is that if and when robots actually do start destroying many human jobs, it is stupid to assume that the governments will sit around doing nothing. There will be huge pressure on them to react and make it difficult for companies to replace human beings with robots.

Hence, the case for robots completely taking over human jobs is a tad overblown. Having said that, this trend is likely to hit India sooner rather than later, and is likely to make the manufacturing game to create economic growth a little difficult, to put it mildly.

At the same time, India should not try to become another China. As the then RBI Governor, Raghuram Rajan, warned in a December 2014 speech: "Export-led growth will not be as easy as it was for the Asian economies… [which] took that path before us…. Slow-growing industrial countries will be much less likely to be able to absorb a substantial additional amount of imports in the foreseeable future.

Other emerging markets certainly could absorb more, and a regional focus for exports will pay off. But the world as a whole is unlikely to be able to accommodate another export-led China."[271]

In this scenario, the government should first encourage companies to make products in India for the Indian market. Given India's huge population, this could be a viable strategy. This would be different from import substitution, because the Indian consumer now has access to quality products from all over the world. Hence, anything shoddy would not pass muster.

Another reason why this makes sense is because of the huge trade deficit that India runs with China. This basically means that India imports significantly more from China than it exports to it. In fact, over a very short period of time, China's share in India's trade deficit has jumped up majorly. In 2009-2010, China formed 18 per cent of India's trade deficit. This jumped to 35 per cent in 2014-2015 and 43 per cent in 2015-2016 (April 2015 to February 2016).[272]

India's exports to China, on the other hand, have barely moved over the years. In 2005-2006, they stood at $6.8 billion. This moved at a snail's pace to $8.3 billion in 2015-2016 (April 2015 to February 2016). During the same period, the imports had jumped from $10.9 billion to $56.9 billion. The reason for this huge difference lies in the fact that a bulk of India's exports to China are low-value-added products like cotton, copper alloy and iron ore. On the other hand, India imports high-value-added products like electrical equipment, machinery and mechanical appliances as well as electronic products.[273]

Consider my personal situation. I am writing this book on a Lenovo laptop, which is Made in China. The Kindle book reader which I use to refer to many books that I have quoted here was assembled in China. My internet connection is provided by Reliance 4G Wi-Pod. The device has been made by the ZTE Corporation, which is based out of Shenzhen in China. I use the Moto g4 PLUS mobile phone, which is Made in China. I own the most basic model of a Hewlett Packard printer, which is Made in China. I own a Toshiba television, which also happens to be Made in China.

The larger point is that a large section of the products that the Indian middle class uses these days is ultimately Made in China. As mentioned earlier, even products as quintessentially Indian as Holi

colours and *pichkaaris*, or Lakshmi and Ganesh statues for Diwali are now Made in China.

Some of these products are not high on technology and are now Made in China simply because, given the economies of scale, it is just cheaper to manufacture them there. India can achieve the same economies of scale if it has the right labour laws as well as physical infrastructure in place.

While it is important to encourage companies to make in India for an Indian market, at the same time, it is important not to lose focus of the export market. One major reason for this lies in the fact that China's cost advantage is fast eroding. In fact, the cost of producing goods in China is now just marginally better than in some of the developed countries. Its wages, adjusted for productivity and natural gas costs, have more than doubled over the period of the ten years up to 2014. At the same time, electricity costs have risen by more than 60 per cent. The Chinese yuan has also appreciated against the dollar, making Chinese exports expensive.[274]

The argument that is often made is that India can capture the export-oriented industries that China is vacating, and will surely have to vacate, because of a labour cost disadvantage in comparison to India. But the point is that, if cost were the only parameter, then there are other cheaper countries, like Bangladesh, that could be used as a manufacturing base.[275]

In fact, if we look at the cost factor, India has the second lowest manufacturing cost (Indonesia is lower) among the top 25 exporting countries in the world.[276] Nevertheless, it is important to realise here that companies set up a manufacturing base in China not just because of the low cost, but also because of the very good infrastructure that was available. And such an infrastructure is clearly not available in India right now.

Indeed, almost all countries in East Asia offer an easier working environment than what is available in India.

So what does India need to do in order to be able to attract businesses which want to move away from China because of high labour costs? As Rajan puts it:

> This means we have to work on creating the strongest sustainable unified market we can, which requires a reduction in the transactions costs of buying and selling throughout the country. Improvements in the physical transportation

> network will help, but so will fewer, but more efficient and competitive, intermediaries in the supply chain from the producer to the consumer. A well-designed Goods and Services Tax will help by reducing state border taxes and will have the important consequence of creating a truly national market for goods and services, which will be critical for our growth in years to come.

Hence, there are many things that need to be done in order to get India's manufacturing sector going.

****

In 2012, the World Bank published a report titled *More and Better Jobs in South Asia*. In this report, it asked Indian entrepreneurs the major constraints that they faced. The report categorised states in which the entrepreneurs were working into two groups—high income and low income. For the low-income group, electricity, or rather the lack of it, was the number one concern. For high-income states, electricity was the number three concern. Their number one concern was corruption, which happened to be the number two concern for the low-income states.

In fact, the other major concerns were as follows: 1) tax administration; 2) transport; 3) labour regulations; 4) government policy uncertainty; 5) access to land; 6) inadequately educated labour; and 7) courts.

As the report pointed out: "The top three constraints (corruption, electricity and tax administration) are the same for low- and high-income states. Firms in low-income states complain more about inadequate physical infrastructure (electricity, transport, access to land) and crime; firms in high-income states complain more about policy uncertainty and labour regulation."

In fact, the World Bank releases the Ease of Doing Business Rankings every year. In 2016, India came in at 130 out of 189 countries. In 2015, India had stood at the 134th position. What needs to be mentioned here is that India is represented in the rankings only by the cities of Mumbai and Delhi. Hence, the Ease of Doing Business Rankings published every year are a representation of the ease of doing business in Mumbai and Delhi, and not the entire country.

Table 6.1 shows ten parameters along the lines of which the Ease of Doing Business rankings are determined. As is clear from Table 6.1, India's performance has been disastrous on many fronts.

Discussing all the ten parameters would go beyond the scope of

this book, but I will discuss a few of them as well as a few of the shortcomings pointed out by the World Bank jobs report.

Table 6.1: The World Bank Ease of Doing Business Rankings parameters as applied to India.

Parameter	2016	2015	Change in Index
Starting a Business	155	164	9
Dealing with Construction Permits	183	184	1
Getting Electricity	70	99	29
Registering Property	138	138	No change
Getting Credit	42	36	−6
Protecting Minority Investors	8	8	No change
Paying Taxes	157	156	−1
Trading Across Borders	133	133	No change
Enforcing Contracts	178	178	No change
Resolving Insolvency	136	136	No change

Source: http://www.doingbusiness.org/data/exploreeconomies/india/.

Take the case of electricity, one of the parameters in which the country has done relatively well. Its ranking has jumped from 99 to 70 among the 189 countries. This was primarily because the electricity utilities in Delhi and Mumbai made the entire process of getting an electricity connection easier. As the report accompanying the rankings points out: "The utility in Delhi made the process for getting an electricity connection simpler and faster by eliminating the internal wiring inspection by the Electrical Inspectorate. The utility in Mumbai reduced the procedures and time required to [get an electricity connection] by improving internal work processes and coordination."

There are a couple of points that come up here: a) The Ease of Doing Business ranking takes into account only the ease with which an electricity connection can be got in the two Indian cities of Delhi and Mumbai. It has nothing to say about the ease with which an electricity connection can be got across the length and breadth of India. b) The Ease of Doing Business ranking has nothing to say about the reliability of the electric supply. The electricity supply across large parts of India is at best erratic, and this means that around 40 per cent of the firms generate their own power, as per the *More and Better Jobs in South Asia* report.[277]

The question is: Why is the power supply so erratic? Until very

recently, India did not produce enough power, i.e., it was a supply issue. There was only so much power going around, and this meant that state electricity distributors had to resort to load shedding. This also meant that manufacturing units had to make their own electricity generation arrangements, which added to the cost of what they were producing.

The electricity shortfall, or power deficit, as it is referred to, has been narrowing over the years. It was at 8.7 per cent in 2012-2013 and was down to 2.1 per cent in 2015-2016.[278] In July 2016, the Central Electricity Authority projected that India would have a power surplus in 2016-2017. For the period from April 2016 to March 2017, the country is likely to have an excess electric supply of 1.1 per cent.[279]

This power surplus comes with a few caveats. As the Load Generation Balance Report 2016-2017 points out: "Surplus energy is anticipated of the order of 3.3 per cent and 6.9 per cent in the Southern and Western Regions, respectively. [The] Northern, Eastern and North-Eastern regions are likely to face energy shortage[s] of 1.8 per cent, 10.3 per cent and 8.3 per cent, respectively. The peaking shortages are likely to prevail mainly in the Northern, Southern and North-Eastern Regions to the tune of 1.6 per cent, 10 per cent and 3.8 per cent, respectively."

Hence, the entire country will not have a power surplus in 2016-2017. Only the Southern and Western parts of the country will have a surplus. The Northern, Eastern and North-Eastern regions will see deficits. In fact, even within regions there is a huge variation. Like in the Northern Region, Uttar Pradesh is likely to see a deficit of 9.7 per cent. Jammu and Kashmir is likely to see a deficit of 15.8 per cent. In comparison, Haryana and Himachal Pradesh are likely to see a surplus of 7.9 per cent and 3.5 per cent, respectively.

In the Eastern region, Bihar and Jharkhand are likely to see a deficit of 18.4 per cent and 7.2 per cent, respectively. The power-deficit states need to buy power from the power-surplus states in order to ensure that there are no power cuts.

Furthermore, this power surplus is only for the population that is connected to the electricity grid. As of mid-July 2016, only 9,085 villages across India remained which were not connected to the electricity grid.[xiii]

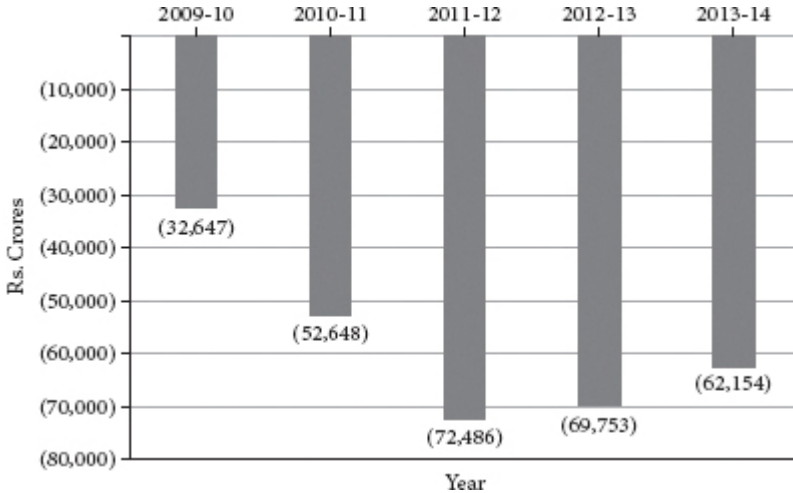
This is an extremely small number, given that India has around 6.38 lakh villages. Nevertheless, a large number of households across the country still do not have access to electricity. Around six crore rural households, which form around one-third of the rural households, do not have an electricity connection.[280]

What this means is that even though a village is put on an electricity grid, that doesn't mean that all the households in the village are electrified. So India's power surplus is to the extent of the fact that a large number of families across rural and urban India do not have access to an electricity connection. The situation is dire in states like Bihar, where 87 per cent of rural households and 33 per cent of urban households do not have access to an electricity connection. For Uttar Pradesh, the figures stand at a slightly better 71 per cent and 19 per cent, respectively. Having said that, there are some other states, like Gujarat, Maharashtra and Tamil Nadu, which have universal access to electricity.[281] It needs to be pointed out here that these are estimates from the 2011 Census. The chances are that things would have improved since then.

Getting back to the point, during 2016-2017, India should have a power surplus. Now does this automatically mean that Indian manufacturing can finally look towards an uninterrupted power supply? Not really.

The governments over the years have aggressively promoted electricity generation without getting around to cleaning up the mess that the State Electricity Boards (SEBs) are in. The SEBs across the country have accumulated losses amounting to Rs. 4 lakh crore, or 3 per cent of the GDP.[282] In fact, the total losses of the electricity utilities between 2011-2012 and 2013-2014 amounted to a total of Rs. 2,04,393 crore (as can be seen from Figure 6.1).[283] This includes the losses of the SEBs as well as those of the transmission, distribution and generation companies, which the SEBs in many states have been broken down into, as per the Electricity Act of 2003. The major part of the loss is in distribution. Furthermore, these losses are after taking into account the subsidies paid by the state governments.

Figure 6.1: The yearly losses of the State Electricity Boards between 2009 and 2014.



Source: The Performance of the State Power Utilities for the years 2011-12 to 2013-14, July 2015.

These losses are on account of two factors: a) A large number of consumers continue to be unmetered in many states. This basically means that many consumers use power, but they do not pay for it. Those who have lived in smaller towns or continue to live there would know that every locality has its own expert who specialises in hooking up an illegal electricity connection from the local grid. b) Power to agriculture is subsidised. The sale to agricultural consumers amounted to around 22 per cent of all the power sold in 2013-2014. But it made for only 8 per cent of the revenue. In comparison, the sale to industrial consumers amounted to around 29 per cent of all the power sold, while, nevertheless, it made up for 41 per cent of the overall revenue. This clearly tells us that the industry that pays for its power subsidises the farmer.

This price distortion is a feature of several sectors of the Indian economy. The idea is to make things easier for the weaker sections of society (in this case, the farmer), but it ends up creating other problems. One of the things that has happened because of free electricity to farmers in a few states is the overpumping of water. (We shall look into this in detail in Chapter 12.) There are other repercussions as well, which we shall discuss.

Those who use electricity and do not pay for it cause very high Aggregate Technical and Commercial (ATC) losses for the SEBs as well as the power distribution companies. Take a look at Table 6.2, which shows the region-wise ATC losses of the SEBs and the power departments of the states which sell power directly to consumers.

A state like Jharkhand, where the SEB has not been split up into different companies, had ATC losses of 42.2 per cent in 2013-2014. In the case of Sikkim and Arunachal Pradesh, it was at 71.2 per cent and 68.2 per cent, respectively.

Table 6.2 does not show the ATC losses of the states that have power distribution companies. Even in states where the SEBs have been broken up into multiple companies, the ATC losses are high. In the case of Bihar, they are at 46.3 per cent. In the case of Odisha, they are at 39.2 per cent.

Table 6.2: Region-wise break-up of the ATC losses of the SEBs between 2012 and 2014.

Region	2012-13 (in%)	2013-14 (in%)
Eastern	42	38
North-Eastern	38.3	33.9
Northern	28.9	24.9
Southern	17.4	19.1
Western	23.4	18.4
National	**25.5**	**22.7**

Source: The Performance of the State Power Utilities for the years 2011-12 to 2013-14, July 2015.

The idea behind breaking up the SEBs was that, while electricity transmission is a natural monopoly, the same should not be the case with electricity generation and distribution. Private sector companies were to be allowed into the generation and distribution space so that the large consumers would be able to buy electricity from multiple sellers.[284] But nothing of that sort has happened. While private companies are entering electricity generation, the entire electricity distribution business continues to be more or less a state monopoly. And this is clearly not helping anyone.

The ATC losses and the losses that the distribution companies incur on supplying cheap or free power to the agriculture sector has led to the accumulation of massive losses. At the same time, the accumulation of these losses continues. Hence, theoretically, if the SEBs and the power distribution companies want to limit their losses, then the best thing for them to do is to not supply any power at all. In that situation, their losses would be limited to the salaries they pay to their employees.

Of course I am exaggerating the situation here. But the broader point is that if the SEBs and power distribution companies want to

limit their losses, then they need to limit the electricity that they supply. Also, at the same time, even if India has a power surplus, the SEBs and power distribution companies are cash starved and really not in a position to buy power in many cases.

As the Power Minister Piyush Goyal lamented in June 2016: "We're selling power for Rs. 3.70 per unit to Uttar Pradesh…. What can I do if UP does not buy power?" In comparison, the central government used to sell power at Rs. 10 per unit earlier, Goyal said on that occasion.[285] The SEBs and the power distribution companies do not have enough money going around to be able to buy power. Hence, even though India might have surplus power, load shedding in large parts of the country will continue to be the order of the day.

As the Load Generation Balance Report points out: "The remaining states [i.e., states which have a power deficit] would face both peaking and energy shortages in varying degrees during 2016-2017. However, the actual shortage in a state would depend on the extent to which the state is able to get additional power from the surplus states." And this ability depends on whether the state has enough money going around to buy that additional power. Many states don't.

Let's take the case of Uttar Pradesh. The government-run electricity company in Uttar Pradesh suffered losses of Rs. 17,678 crore in 2013-2014. Given that, the state has no money to buy the surplus power that is expected to be available to the country as a whole.

Furthermore, the state had aggregate technical and commercial losses of 24.7 per cent in 2013-2014. This basically means that a major portion of the power that is used is not being paid for. This further means that the state loses money on any extra electricity that it buys and supplies. Hence, if it wants to limit its losses, then it is better off not buying any surplus electricity that is available from other states.

Also, it needs to be pointed out here that the ATC losses figures for various states need to be taken with a pinch of salt. Since only a few states have 100 per cent metering, it is difficult to figure out what the actual losses are. As Sunil Jain, editor of *The Financial Express*, points out: "Often, a number is ascribed to agricultural use to arrive at an ATC figure."[286]

Given the heavy losses that the SEBs and power distribution companies suffer, they are more interested in limiting the same. This is bound to happen when there is a dual pricing of electricity and at

the same time there are huge distribution losses. This goes against the one product-one price principle, which we shall deal with in detail in Chapter 12 and see how going against it hurts the nation as a whole.

So what is the way out of this? Are higher electricity prices the solution? While some increase in electricity prices is inevitable, this can't be a solution. The reason for this is straightforward: it is politically infeasible to do so. Take the case of Rajasthan, which had accumulated losses of Rs. 68,938 crore as on March 31, 2014. The projected increase was at Rs. 2.64 per unit, and if such a hike in electricity tariffs were to be made, it would mean an increase of 72 per cent in the price of electricity.[287] This would of course be politically infeasible.

Over and above this, if politicians got around to raising electricity tariffs, it would reduce the need to cut ATC losses. This is the point that Power Minister Goyal has often made in the past. Data does suggest that ATC losses have been coming down over the years. But this is a really long-term process and needs a lot of political will to push it through.

One good example of the success of this strategy is Delhi. In 2002, the ATC losses in Delhi were 55 per cent. This basically meant that more than half of the power distributed in Delhi wasn't paid for. Electricity distribution in the city-state was privatised, and ATC losses had, by 2013-2014, fallen to around 14.1 per cent. The for-profit companies couldn't operate like an SEB and had to make money. This meant that they went after the power thieves. The three private distribution companies that operate in Delhi filed around 30,000 cases against power thieves every year. The current rate is around 80,000 cases a year.[288]

What this tells us is that low ATC losses are achievable if the power distribution business is privatised and for-profit companies allowed to operate. Of course, privatisation means that the government will have to perform the role of a regulator well enough. As of now, 22 out of the 29 states have electricity regulators, who are mostly retired civil servants.[289] This will have to change. To cut a long story short, Big Government in the power sector will have to go.

What all this also tells us is that anything like this is not going to happen overnight. Furthermore, it will need a lot of political will at the state level to push through anything like this. And given that

elections happen every five years, it may be a politically infeasible thing to do. Hence, any significant reform of the power sector is going to need massive support from the state governments. Only the union government being committed to the entire process won't help.

****

The Power Ministry, led by Piyush Goyal, has tried to sort out the mess through the weirdly titled Ujwal DISCOM Assurance Yojana, or simply UDAY for short. The basic idea behind UDAY was to help clear up the mess that the SEBs and power distribution companies are in. As of March 31, 2015, the SEBs and the DISCOMs (power distribution companies) had total accumulated losses of Rs. 4 lakh crore and a total debt of Rs. 4.3 lakh crore.

Over and above this, they had a negative net worth of Rs. 1,06,653 crore as on March 31, 2014. This was a jump from a negative net worth of Rs. 73,400 crore as on March 31, 2013. In this scenario, it is not surprising that these companies do not have any money to buy power, even though India is expected to be in a power-surplus situation in 2016-2017. Earlier, the problem was that not enough power was being produced, and this led to power cuts. Now that enough power is being produced, the SEBs and DISCOMs do not have enough money to buy that power.

As the press release announcing UDAY pointed out:

> Financially stressed DISCOMs are not able to supply adequate power at affordable rates, which hampers [the] quality of life and [the] overall economic growth and development. Efforts towards 100 per cent village electrification, 24 × 7 power supply and clean energy cannot be achieved without performing DISCOMs. Power outages also adversely affect national priorities like *Make in India*.... In addition, default on bank loans by financially stressed DISCOMs has the potential to seriously impact the banking sector and the economy at large.

In fact, the SEBs and power distribution companies had reached a stage where the yearly operational losses were being funded by taking on more and more debt. They could run this Ponzi scheme primarily because at the end of the day banks knew that they were lending to the government. The outstanding debt jumped from around Rs. 2.4 lakh crore in 2011-2012 to Rs. 4.3 lakh crore in 2014-2015. On this, the SEBs and power distribution companies were paying an interest of 14-15 per cent.

The interest that they were paying on this debt left very little money for anything else. The UDAY reforms basically proposed a debt transfer between the SEBs and power distribution companies and their respective state governments. The UDAY reforms proposed that state governments take over 75 per cent of the debt of their respective SEBs and power distribution companies. 50 per cent of this transfer was to happen in 2015-2016 and the remaining in 2016-2017. This would lower the interest load to 8-9 per cent, because banks lend to governments at lower rates of interest than they do to companies and institutions owned by the state governments.

UDAY further proposed that the state governments take over and fund at least 50 per cent of the losses of the SEBs and power distribution companies in the years to come. Over and above this, UDAY also proposed that the ATC losses be brought down from 22 per cent to 15 per cent through "operational efficiency improvements like compulsory smart metering, upgradation of transformers, meters, etc., energy efficiency measures like efficient LED bulbs, agricultural pumps, fans & air-conditioners, etc."

At the same time, the states were given the assurance that the debt that they would take on to fund the transferring of debts from the SEBs would not be considered while calculating their respective fiscal deficits during 2015-2016 and 2016-2017. The UDAY scheme was optional for the states to join in. Until early July 2016, nineteen states had given their consent to join the scheme. Out of these, ten states,

namely, Rajasthan, Uttar Pradesh, Chhattisgarh, Jharkhand, Punjab, Bihar, Haryana, Gujarat, Uttarakhand and Jammu & Kashmir, had signed the memorandum of understanding with the central government.[290] In June 2016, the union cabinet extended the deadline for states wanting to join the UDAY scheme to March 2017.

It remains to be seen how UDAY plays out. Nevertheless, for industry to get access to uninterrupted power supply, multiple things need to happen. The ATC losses need to come down. Power needs to be priced correctly. The dual pricing system, which has driven many SEBs and power distribution companies towards bankruptcy, needs to end. States which still have SEBs need to break them down into power generation, transmission and distribution companies.

Also, things need to be learned from the Delhi model, and more private companies need to be introduced into the distribution system. Unless some competition is induced into the business, the SEBs and power distribution companies will continue to operate in their current moribund way. This can also be done by selling off some distribution companies to the private sector. The open-access system, envisaged under the Central Electricity Act of 2003, wherein consumers were supposed to be able to buy electricity from multiple companies, needs to become a reality. The trouble in the Indian case is that many businessmen in the power and infrastructure sectors are crony capitalists who, until now, aren't known to do business in an honest way. This essentially means that every state needs a strong electricity regulator, which isn't the case as of now.

Also, at the same time, it is important that the production of coal be opened up for the private sector. Currently, private companies are allowed to produce coal only if they are using it for their own consumption. Hence, a power plant which requires coal can own a coal mine. But this quasi-privatisation of the coal sector needs to end, and commercial coal production needs to be thrown open to private companies so that power companies can have a reliable supply of coal, which is used for the production of electricity. Again, Big Government in coal production needs to end.

Of course, all this needs a lot of political will, both at the level of the central government as well as at the level of the state governments. In fact, a standard excuse for the lack of any reforms in India until now has been that it is not politically feasible. At the same time, no political leader has made an effort to explain economic reforms to people, and this has pushed back the process of reform in

India.

****

As mentioned earlier in the chapter, corruption is among the top three concerns of Indian entrepreneurs, as per the *More and Better Jobs in South Asia* report of the World Bank. And the country saw a lot of corruption and scams coming out into the open between 2009 and 2014.

The Congress-led United Progressive Alliance (UPA) governed the country for the ten years between 2004 and 2014. Many scams came to the fore during those ten years. The biggest of these were the 2G scam and the Coalgate scam.

While a detailed treatment of these scams is beyond the scope of this book, the basic issue at the heart of both the scams was the mispricing of assets, which created an opportunity for a huge arbitrage. For instance, in the case of the 2G scam of 2008, the Union Telecom Minister, Andimuthu Raja, decided to allocate the 2G wireless spectrum to companies at a 2001 price on a first come-first served basis. An entry fee of Rs. 1,651 crore, set in 2001, was being charged. In the meantime, the Indian telecom sector had totally changed.

First and foremost, just on the basis of inflation, anything in 2007 should have cost more than what its price was in 2001. Furthermore, teledensity was at 3.6 per 100 of the population in 2001. By September 2007, a teledensity of 18.2 had been reached. Hence, the telecom market had exploded. Given this, the government should have priced the spectrum higher.

The Comptroller and Auditor General (CAG) report on the 2G scam had four computations of the loss to the country because of the 2G spectrum being sold cheap. These numbers were Rs. 67,364 crore, Rs. 1,76,645 crore, Rs. 69,626 crore and Rs. 57,666 crore.

The Supreme Court cancelled all the 122 licences that had been allotted by Raja. The Norwegian telecom company Telenor was hit very badly. It had bought into one of the companies which had got the licence for around $1.1 billion and then spent a billion dollars more to build its business in India. With the licence being cancelled, the company had no business left.

The 2G scam wasn't the only scam that has hit India over past decade. In fact, in a 2015 research paper titled 'Corruption in India: Bridging Research Evidence and Policy Options', Sandip Sukhtankar and Milan Vaishnav point out that the biggest corruption scandals from 2000 onwards had a mean scam value of Rs. 36,000 crore and a median of Rs. 12,000 crore.[291]

There are multiple ways in which a scam hurts the country. If the government sells an asset cheaply, it loses out on potential revenue. This is revenue which could have been spent well in many areas where the government actually needs money. Hence, the country loses out on the multiplier effect as well. The bribes that the politicians receive are in the form of black money, on which taxes aren't paid. The country loses again.

The other big scam in the recent past was Coalgate. Starting in the 1990s, the government gave away more than 200 coal blocks free. The government could have earned a lot of revenue had they auctioned it. Not surprisingly, many of the promoters of the firms which got coal blocks were closely linked to politicians.

Also, given that the coal blocks were being given away for free, many people wanted them. As the former Coal Secretary PC Parakh writes in *Crusader or Conspirator—Coalgate and Other Truths*: "By the time I took charge of the ministry [in 2004], the number of applicants for each block had increased considerably, although still in single digits. I found a number of applicants fulfilling the criteria specified for the allocation of each block on offer. This made objective selection extremely difficult."[292]

In fact, in the years to come the situation became significantly worse. As Parakh writes: "According to the CAG's report, 108 applications were received for Rampia and Dip Side of Rampia Block [the names of two coal blocks]. I found it difficult to make an objective selection when the number of applicants was in single digits. How could the Screening Committee (which allotted coal blocks) take objective decisions when the number of applicants per block had run into three digits?"[293]

Allocating blocks through an auction would have taken care of the following issues:[294]

a)By attaching a certain price to the coal block, the government would have been able to keep the non-serious players out. Take

the case of the Rampia coal block mentioned above, for which 108 applications were received. When something is available for free, everybody wants it.

b) Also, once companies had to pay for a block, the chances were that they would try and ensure that they start producing coal as soon as possible. This was something that was not happening earlier. As per the 11th Five-Year Plan, which started in 2007-2008, the production from the captive coal blocks, which were given away free, was expected to touch 111 million tonnes of coal per year by 2011-2012. The captive coal blocks produced just 36.2 million tonnes of coal during the course of that year. In 2013-2014, these blocks produced only 39 million tonnes. What this tells us is that many non-serious players had got the blocks as well.

c) Indian businesses have for far too long been used to getting things for free, including coal. This has led to the misconception that thermal power is cheap, which it is not if the right price is paid for it. Once the right price of coal is taken into account, other forms of generating electricity might start to look viable. And that will be good for the environment, among other things.

d) And finally, transparency is very essential whenever the government is selling a public asset. It goes a long way in controlling crony capitalism. Coal auctions are worth all the trouble just for this one reason. In fact, this was one of the first things that the Modi government initiated after coming to power.

Also, as I have mentioned throughout this book, the Indian government and politicians don't seem to like the idea of the market deciding on things, and hence, they like to meddle with it. As Sukhtankar and Vaishnav point out:[295]

> The regulatory intensity of the state with respect to private business activity not only minimises the role for market forces, but also facilitates a natural *quid pro quo* whereby the state provides licences, permissions, clearances, etc. in exchange for side payments. This is why India reliably rates poorly on most perception-based indicators of corruption and bribery. Second, corruption is most intense in those sectors where the regulatory footprint of the state is the greatest.

This is another way in which Big Government hurts the economy.

Hence, if widespread corruption is to be controlled, Big Government needs to be reined in. Furthermore, the impression that all these scams create in the minds of the people is that if you want to be successful at business, you need to be dishonest. This, according to me, is probably the biggest loss, and something which cannot be quantified. It keeps many honest people away from doing business, even though they have an idea, are in a position to raise the money required for it, and have the required motivation to turn into entrepreneurs. And it is ultimately entrepreneurs who create jobs, jobs that the country badly needs.

****

While large-scale corruption has its share of costs, it doesn't really impact the small entrepreneur directly. The small entrepreneur needs to deal with petty corruption. This corruption stems from Big Government as well. The National Manufacturing Policy of 2011 estimates that, on an average, a manufacturing unit needs to comply with nearly 70 laws and regulations. At the same time, these units sometimes need to file as many as 100 returns a year. Furthermore, India has 150 state level-labour laws and 44 central-level labour laws.

Given this, it is safe to say that it is almost impossible to run a business without breaking some rule or law. Also, given the fact that the government wants entrepreneurs to follow so many rules and laws, there are inspectors whose job it is to make sure that everything is being followed. Of course, for a small price, these inspectors are willing to look the other way.

As Gurcharan Das writes in *India Grows at Night—A Liberal Case for a Strong State*: "The 'licence raj' may be gone, but an 'inspector raj' is alive and well in many states; the 'midnight knock' from an excise, customs, labour or factory inspector still haunts the small entrepreneur…. Industry studies show that bribes constitute a significant cost of doing business. More than the money, it is the fear of harassment and humiliation by officials that deters a young person from becoming a manufacturing entrepreneur."[296]

All this leads to petty corruption and pushes up the cost of doing business for entrepreneurs. It is also one of the reasons why India shows up very low in the 'ease of starting a new business' rating parameter in the Ease of Doing Business rankings. So not only does it cost existing entrepreneurs, but it also makes things difficult for

prospective ones as well.

A calculation made by the economists Laveesh Bhandari and Bibek Debroy estimated the private earnings of public officials at Rs. 92,123 crore, or 1.26 per cent of the GDP, in 2010-2011.[297] The point being that the total cost of petty corruption and the bribes that public officials take turn out to be just as costly as the big scams are. It is just that they are much more difficult to measure.

The question is: What can be done to control this phenomenon? One answer can be the inculcation of better moral values in children through the education system while they are young. But, as we have already seen, the Indian education system is not able to deliver on basic things like reading, writing and basic maths. Hence, this might be a bit too much of a utopian idea.

Another answer is simplification in the rules and laws that entrepreneurs need to follow in order to get a business going and then keep it running. The number of permits and no-objection certificates needs to be slashed. Over and above this, the multiple inspections carried out by inspectors need to be replaced with self-certification along with random checks.

As Mihir Sharma writes in *Restart*: "The Indian state is run for its nice, kindly inspectors, and not for workers or entrepreneurs."[298] This needs to be corrected. Again, this is easier said than done, given that those who benefit from the current situation, whether directly or indirectly, are likely to resist.

As Vijay Joshi writes in *India's Long Road*: "It is sometimes argued that both society and the state should ignore corruption because it has the virtue of making bureaucratic wheels turn faster ('speed money') …. A bribe culture may have precisely the opposite effect and induce bureaucrats to create more red tape, licences and other barriers to entry in order to increase their own take."[299]

In fact, the economist Kaushik Basu has an interesting idea which he originally wrote about when he was the Chief Economic Advisor to the Ministry of Finance between 2009 and 2012. He talks about this idea in detail in his book *An Economist in the Real World*.

Basu's idea essentially tries to distinguish between the bribe giver and the bribe taker. As he writes: "Under the current law, once a bribe

has been paid, the interests of the bribe giver and the taker become fully aligned…. Hence, they tend to collude to keep the act of bribery hidden."[300] Given this collusion, it is hardly surprising that bribe giving is rarely revealed in courts.

And this leads to a situation where a majority of bribery incidents go unpunished. Basu proposes that this be changed by making a simple amendment to the Prevention of Corruption Act. The act of giving a bribe should not be declared illegal, while the act of taking a bribe should continue to be illegal. In fact, if bribery charges are proven, the bribe taker should be made to return the bribe to the bribe giver.

What will this do? As Basu writes: "He [the civil servant taking a bribe] will know that, once he has taken the bribe, he can no longer rely on help from the giver in keeping this fact a secret. Unlike [under] the existing law, *after the bribery* [emphasis original], the interests of the giver and the taker are diametrically opposed to each other. Knowing that this will happen, the bribe taker will be much more hesitant to take the bribe in the first place."[301]

The point that Basu is trying to make is that, if the law as it currently stands is changed, the incidence of bribery would come down.

This idea sounds very interesting, although at the same time it is very radical for the Indian government. At the very basic level, a better legal system which makes faster decisions would go a long way in controlling corruption in the country (as we shall see in the next section).

If a programme like *Make in India* has to really take off, then the corruption in India has to come down. The act of setting up a business and then running it needs to become substantially easier than it currently is. Only then will more individuals turn towards genuine entrepreneurship.

****

In the Ease of Doing Business rankings, India stands 178th as far as enforcing contracts is concerned. The reason for this is fairly straightforward. If one party to a contract does not keep his side of the deal, it takes way too much time to get things sorted out by approaching the courts.

As per the Ease of Doing Business rankings, it takes 1,420 days, or nearly four years, in Mumbai to resolve a dispute. The time to resolve a dispute is "counted from the moment the plaintiff files the lawsuit in court until payment". Furthermore, "this includes both the days when actions take place and the waiting periods between". It is safe to say that the time taken to resolve a dispute by approaching the court would be significantly higher than four years in most parts of the country.

Anyone who has ever done the rounds of any Indian court would know that the Indian judicial system places very little value on time. In fact, they still shut down for a summer vacation, something which has survived from the days of the British Raj. Over and above this, adjournments of cases are carried out on a fairly regular basis. In fact, sometimes lawyers of two opposing parties are known to get together to keep getting cases postponed and, meanwhile, keep making easy money.

Not surprisingly, there is a huge number of case backlogs. The 246th Law Commission Report, titled *Arrears and Backlog: Creating Additional Judicial (Wo)manpower,* defines backlog as: "When the institution of new cases in any given time period is higher than the disposal of cases in that time period, the difference between institution and disposal is the backlog. This figure represents the accumulation of cases in the system due to the system's inability to dispose of as many cases as are being filed."

Data from the 24 High Courts shows that, up to the year 2013, the backlog was of 44 lakh cases. In the case of the lower courts, the backlog was of 2.6 crore cases. For the Supreme Court, the backlog was of 64,919 cases as on December 1, 2014.[302]

As of 2011, around 24 per cent of cases had been pending in courts for at least 5 years. Nearly 9 per cent of the cases had been pending for more than 10 years. At the beginning of 2014, around 3.1 crore cases were pending in courts across India.[303]

One reason for this lies in the fact that the government is the biggest litigator. As Gurcharan Das writes in *India Grows at Night*: "The main culprit of the judicial delay [is] the government, which appeal[s] all judgements automatically and proceed[s] to lose them again in the higher courts…. The problem [lies] in the fact that the decision to litigate [is] made at the lowest level in the bureaucracy but the

decision not to litigate [is] made at the highest level. If this process were simply reversed, government litigation would come down."[304] Within the government, the police force contributes the most cases, in particular the criminal ones.[305]

What does not help is the fact that India has too few judges and, at the same time, there are huge vacancies which haven't been filled up. India has around 16.5 judges per ten lakh of its population. In comparison, the United States has 101 judges for a comparable population.[306] Interestingly, the Supreme Court, in a judgement on March 21, 2002, had said that there should be at least 50 judges per every 10 lakh Indians. [307]

As of December 31, 2015, the total number of sanctioned posts of judicial officers in the district and subordinate courts that come under the 24 High Courts had stood at 20,620. Of these, 4,501, or almost 22 per cent, were vacant.[308] In fact, a June 2016 news report in *The Times of India* said that five High Courts are functioning with a more than 50 per cent vacancy.[309]

This has led to a situation wherein the existing judges have to dispense cases very quickly. A study carried out by Daksh, a non-governmental organisation based out of Bengaluru, found that the most relaxed High Court judges had around 15-16 minutes to hear a case, whereas the most busy ones had around 2.5 minutes. Hence, on an average, a High Court judge had around five to six minutes to decide on a case. In fact, at the Kolkata High Court, there are 163 cases listed before a judge on any given day in the five and a half hours that are spent hearing cases.[310]

If a High Court judge is spending two to two and a half minutes on deciding a case, it can't possibly be a good thing. One thing that needs to happen is that the number of cases being filed needs to come down. Big Government needs to litigate less for starters.

The vacancies in the courts need to be filled up. This would go a long way in bringing down the backlog. Between January 2009 and September 2015, the backlog of cases in courts across India increased from 3 crore to 3.1 crore. This is not a huge jump. While there is a backlog of more than 3 crore cases, what we do not realise is that courts dispose of around 2 crore cases every year. Between 2009 and 2015, the average vacancies of judges against the sanctioned strength was around 21 per cent. During the same period, the backlog of cases

increased at around 1.5 per cent per year. If there had been no vacancies, then the backlog could have been brought down to less than one crore by now.[311]

The sad part is that neither the government nor the judiciary has paid attention to this basic fact, which could lead to the number of outstanding cases coming down in quick time.

Furthermore, special courts need to be set up to get rid of cases that do not need much expertise. The Law Commission Report, cited earlier in this section, talks about the setting up of special morning and evening courts for dealing with traffic/police *challan* cases. These cases constituted around 37.4 per cent of the pending cases over the previous three years, the 2014 report points out.

As the report further points out: "These Courts should be in addition to the regular Courts so that they can reduce the case load of the regular Courts…. Recent law graduates may be appointed for short durations, e.g., 3 years, to preside over these special traffic Courts. These special Courts should only deal with cases involving fines."

Only once the backlog of cases starts to come down will the Courts be able to spend more time on more important cases. Furthermore, only then will it take lesser time in resolving a contract dispute by taking it to court. As is often said, and at the cost of sounding very clichéd, a very fundamental reform of the judicial system is needed. Only such a reform will help India go up in the Ease of Doing Business rankings and, more importantly, improve the ease of doing business in reality.

This can only happen if the number of things that need the attention of Big Government as things currently prevail comes down. The government needs to concentrate on fewer things, and among them, the administration of justice and the protection of contracts and property rights are some of the most important.

****

There are many other constraints to the *Make in India* programme being able to take off. And most of them are Big Government factors, as we shall see.

The indirect tax system that entrepreneurs need to follow is fairly complicated. This despite the fact that the tax system has been

simplified over the past two decades. But the cascading effect of these taxes and the complexity still remains. As the World Bank jobs report points out:

> It seems likely that it is the complexity and lack of uniformity of tax systems rather than the tax rates themselves that impose significant costs on firms. These tax systems create distortions in the economy and make it difficult to raise adequate revenues. Simplifying the tax regimes (by reducing the number of taxes and exemptions) and widening the tax base is likely to benefit firms and [reduce] distortions in the economy.

For the past many years, India has been trying to move towards a uniform, nationwide Goods and Services Tax (GST). On August 3, 2016, the Rajya Sabha, the upper house of Indian Parliament, finally passed the 122nd Constitutional Amendment Bill for the introduction of the Goods and Services Tax (GST). This was after the Lok Sabha, the lower house of Indian Parliament, had passed the Bill in May 2015.

The passing of the Bill will be looked upon as an important achievement for the Modi government. Also, credit must be given to the Modi government for reaching out to the Opposition and getting almost everyone on board (excluding the AIADMK party) to get the Bill passed in the Rajya Sabha.

Having said that, the Bill could have been passed during the period 2009-2014 if the Bhartiya Janata Party, which is in power right now, hadn't opposed it as vehemently as it did then.

Indirect tax is essentially a tax on goods as well as services, and not on income or profits. India currently has a plethora of indirect taxes, both at the state government level as well as at the union government level. The GST will subsume many of these taxes. It hopes to have one indirect tax for the whole nation, and this will convert the country into one unified common market.

The GST, or value added tax (VAT), as it is also known as, is already present in large parts of the world.

Until now, the Constitution empowered the central government to levy an excise duty on manufacturing. Let's take the case of a company which manufactures cars. It needs to pay an excise duty to the union gov ernment on every car that it manufactures. The current rate of excise duty is 12.5 per cent on small cars. While the company pays this tax to the government, it ultimately recovers it from the end consumer who buys the car.

The central government can also levy a customs duty on exports as well as imports. Furthermore, the Constitution allows the central government to levy a service tax on the supply of services, which the state governments can't.

On the other hand, the state governments are allowed to levy a VAT, or a sales tax, on the sale of goods. This division has essentially led to a multiplicity of taxes.

According to the Report of the Select Committee of the Rajya Sabha on the 122nd Amendment Bill of the Indian Constitution, presented in July 2015, this exclusive division of fiscal powers has led to a multiplicity of indirect taxes in the country. In addition, Central Sales Tax (CST) is levied on the inter-state sale of goods by the Central Government, but collected and retained by the exporting states. Over and above this, "many states levy an entry tax on the entry of goods in local areas".

This multiplicity of taxes has led to an inherently complicated indirect tax structure. This is another excellent example of Big Government. As the Select Committee Report points out:

> Firstly, there is no uniformity of tax rates and structure across States. Secondly, there is [the] cascading of taxes due to 'tax on tax'. No credit of excise duty and service tax paid at the stage of manufacture is available to the traders while paying the State-level sales tax or VAT, and vice-versa. Furthermore, no credit of State taxes paid in one State can be availed in other States. Hence, the prices of goods and services get artificially inflated to the extent of this 'tax on tax'.

Let's understand this through an example. Let's take the case of a dealer in one state buying goods from another state worth Rs. 1,00,000. As the goods are moving from one state to another, he has to pay on this a central sales tax of Rs. 2,000 (2 per cent of Rs. 1,00,000). His effective purchase price works out to Rs. 1,02,000. On this, he builds a margin of Rs. 8,000 and his sales price works out to Rs. 1,10,000.

When he sells these goods, the state sales tax (or the VAT) will be charged on Rs. 1,10,000. If the tax rate is 5 per cent, then it will work out to Rs. 5,500 (5 per cent of Rs. 1,10,000). This means that the final price of the goods will be Rs. 1,15,500 (Rs. 1,10,000 + Rs. 5,500).

In this case, the state sales tax is also being paid on the central sales tax of Rs. 2,000, which has already been paid. Central sales tax

paid while purchasing goods from one state is not available as an input tax credit while selling the goods in another state. This leads to a cascading effect as tax on tax needs to be paid. In this case, the cascading effect is Rs. 100 (5 per cent of Rs. 2,000, the central sales tax). This ultimately gets incorporated into the price of the goods, making them more expensive than they should be. What this shows is that any form of Big Government comes with a cost attached to it.

The cascading effect and the fact that the indirect taxes already paid in one state cannot be deducted while paying indirect taxes in another state make many Indian businesses uncompetitive. The Report on the Revenue Neutral Rate and Structure of Rates for the Goods and Services Tax (GST), better known as the Arvind Subramanian Committee Report, has an excellent example.

As the report points out: "Consider a simple example, where intermediate goods produced in Maharashtra go to Andhra Pradesh for production of a final good which, in turn, is sold in Tamil Nadu. Effectively, the goods will face an additional tax of 4 per cent, which will reduce the competitiveness of the goods produced in Andhra Pradesh compared with goods that can be imported directly to, say, Chennai from South and East Asian sources."

This basically happens because goods move between states twice and a 2 per cent central sales tax has to be paid each time. As mentioned earlier, tax paid in one state cannot be deducted while paying more indirect taxes in another state. This essentially means that a programme like *Make in India* has to face many problems before it can take off.

Other than central sales tax, state governments levy entry taxes as well. These can be, like octroi, in order to fund a local municipal body, or otherwise. These taxes are collected while goods are entering the state or a town. This explains, to a great extent, why trucks in India move as slowly as they do. This essentially drives up logistical costs.

As the Subramanian Committee report points out:

> One study suggests that, for example, in one day, trucks in India drive just one-third of the distance of trucks in the US (280 km vs. 800 km). This raises direct costs (wages to drivers, passed on to firms), indirect costs (firms keeping larger inventories), and location choices (locating closer to suppliers/customers instead of lowest-cost location[s] in terms of wages, rent, etc.). Furthermore, only about 40 per cent of the total travel time is spent driving; checkpoints and other official stoppages take up almost one-quarter of [the] total travel time.

> Eliminating check-point delays could keep trucks moving almost 6 hours more per day, equivalent to [an] additional 164 km per day – pulling India above [the] global average and to the level of Brazil. So, logistics costs (broadly defined and including firms' estimates of lost sales) are higher than the wage bill or the cost of power, and 3-4 times the international benchmarks.

This will be taken care of if the GST becomes the order of the day. The entry taxes will be subsumed under the GST. This will lead to a dismantling of check-posts at state borders, and there will be no need for trucks to be held up.

Around 72 per cent of Indian freight moves by road. Hence, eliminating check-posts will lead to the faster movement of goods through the length and breadth of the country. It is estimated that "eliminating delays at check-posts will yield additional savings of 0.4-0.8 per cent of [the] sales [of companies]".[312]

While the state governments are yet to agree to the removal of border check-posts, as and when this happens, it will be one of the bigger benefits of the GST. If it doesn't, it will make the GST a little less useful. At least in theory, the GST brings down Big Government.

The GST will subsume multiple indirect taxes. Take a look at Table 6.3. It lists out the indirect taxes which would come under the GST and the indirect taxes which wouldn't.

Table 6.3: Taxes subsumed under the GST and those left out of it.

Taxes to be subsumed under the GST		Taxes to be left out of the GST
Central GST	**State GST**	Basic Customs Duty
Central Excise Duty	Sales Tax	Export Duty
Additional Excise Duties	Entertainment Tax	Road & Passenger Tax
Service Tax	Luxury Tax	Toll Tax
Countervailing Duty	Taxes on lottery, betting & gambling	Property Tax
Special Additional Duty of Customs	Octroi & Entry Tax	Stamp Duty
Surcharges & Cesses levied by the Centre	State Cesses & Surcharges	Electricity Duty
Central Sales Tax	Purchase Tax	Entertainment Tax

		levied by local bodies

Source: CRISIL Research.

While the GST plans to subsume many indirect taxes, it does leave out several taxes as well. Hence, in that sense, the GST is not the one nation-one tax that it is being made out to be.

The GST will take the cascading effect of tax on tax out of the equation. It will allow input tax credit for indirect taxes that have already been paid, irrespective of what kind of indirect taxes have been paid and where they have been paid.

Take a look at Table 6.4. It explains how the GST is expected to work.

Table 6.4: How the GST works.

Basic Information/Kind of Tax	Manu-facturer	Whole-saler	Retailer	Total
A. Transactions (exclusive of tax)				
1. Sales	600	800	1,200	2,600
2. Purchases	0	600	800	1,400
3. Value added (A1 – A2)	600	200	400	1,200
B. VAT/GST				
4. Tax on sales (10% of A1)	60	80	120	260
5. Tax on purchases (10% of A2)	0	60	80	140
6. Net tax liability (B4 – B5)	60	20	40	120
7. Tax on retail sales (10% of A1/R)	NA	NA	120	120

Source: Professor Mukul Asher of the Lew Kuan Yew School of Public Policy, National University of Singapore.

There are three levels in Table 6.4—the manufacturer, the wholesaler and the retailer. Let's start with the manufacturer, who sells a product for Rs. 600 to a wholesaler. He does not purchase any inputs and makes everything in-house. (I know this is an unrealistic assumption, but it keeps the calculations simple.)

On this, the manufacturer pays a tax at the rate of 10 per cent, which amounts to Rs. 60. The wholesaler sells the product for Rs. 800. On this, he has to pay a tax at the rate of 10 per cent. This amounts to

Rs. 80, but he also gets credit for the Rs. 60 indirect tax which the manufacturer has already paid. Hence, his tax outflow amounts to Rs. 20.

The retailer finally sells the product for Rs. 1,200. On this he pays tax at the rate of 10 per cent. This amounts to Rs. 120. But he gets credit for Rs. 80 (Rs. 60 paid by the manufacturer and Rs. 20 paid by the wholesaler). Hence, he actually pays a tax of Rs. 40. In this way, there is no cascading effect and all the tax that has already been paid is taken into account.

What this also tells us is that the GST is a destination-based tax and will finally accrue to the government once the final customer has bought the goods or services. This explains why political parties that rule states like Bihar and Uttar Pradesh have come out in its support. While these states may not have a large industrial base, they do have consumers.

The GST has a self-policing feature built into it. As the Subramanian Committee report points out: “To claim input tax credit, each dealer has an incentive to request documentation from the dealer behind him in the value-added/tax chain. Provided the chain is not broken through wide-ranging exemptions, especially on intermediate goods, this self-policing feature can work very powerfully in the GST.”

This, theoretically, should be one of the biggest benefits of the GST over the long term, as it would make the entire system more transparent. Having said that, this could also bring down the price competitiveness of unorganised players, as they would have to go legitimate in order to keep their businesses going. This would increase their costs and could help the more organised players, who already have a strong information technology infrastructure in place.

But there might be some starting troubles on this front. The onus is on the end customer/consumer, if he wants to take the input tax credit, to prove that all the suppliers in the value chain have paid their share of taxes. This is as per Section 16(11)(c) of the Act. Basically, what the section says is that, if a supplier has not furnished proper returns or made the correct payment, then the customers of the supplier cannot avail of the input tax credit. And if it has been given, it will be reversed.

Furthermore, a lot depends on what rate of tax is decided upon. This is something that the GST council, headed by the Finance

Minister, needs to decide upon. The Subramanian Committee has basically recommended four rates of taxes: a rate of 2 to 6 per cent for precious metals; a low rate on goods of 12 per cent; a standard rate on goods and services between 16.9 per cent and 18.9 per cent; and a high rate on goods of 40 per cent.

It is important that the GST council choose a reasonable rate of tax. The unweighted OECD (Organisation for Economic Co-operation and Development) average rate for the GST was 19.1 per cent in 2014 and 18.7 per cent in 2012. The recommendation of the Subramanian Committee of a standard rate of 16.9 per cent to 18.9 per cent is in line with the OECD average.

Given that the current rate of service tax is 15 per cent (including the cesses), a tax rate of 16.9-18.9 per cent is likely to make services expensive in the short run. This basically means that stuff on which you pay service tax (from your mobile phone bills to your credit card bills) is likely to become more expensive.

One estimate expects inflation, as measured by the consumer price index, to go up by 60 basis points in the short term.[313] This will be in line with global evidence, where inflation does go up in the short term wherever the goods and services tax is actually implemented.

By the time the GST becomes the order of the day, the next Lok Sabha elections will be around one to two years away. Will the government be willing to take on this risk? In the run-up to the Lok Sabha elections, the rate of inflation, as measured by the consumer price index, anyway goes up as the government increases spending on subsides.

****

The state governments have come around to the idea of the GST primarily because it allows them access to tax services, which hasn't been the case until now. The GST being adopted has a dual structure, with both the union government as well as the state governments levying a GST. Both the central GST and the state GST will be levied on every transaction of the supply of goods or services happening within a state. The taxes will not be levied on exempted goods and services.

Under the system as it currently is, multiple exemptions are available. Close to 300 items are currently exempt from central excise

duty. Over and above this, nearly 90 items are exempt from the state-level VAT. These items will be merged with the final exemption list under the GST regime.[314]

It needs to be mentioned here that the longer the list of exempted goods and services, the higher the standard rate of the GST will have to be. Given this, the government will have to limit the number of exemptions if it wants a proper GST.

Other than central and state GST, there will be an inter-state GST for transactions happening between states, and this will be collected by the union government. The inter-state GST will be roughly equal to the central GST plus the state GST. Input tax credit will be available on the inter-state GST.

The question is: What will the final GST rate turn out to be? Or will there be multiple rates? Even though the former Union Finance Minister P Chidambaram, of the Congress Party, has been talking about a standard GST rate of 18 per cent, the Finance Minister of Kerala, Thomas Isaac, has remarked that capping the GST at an 18 per cent rate is too low. Other finance ministers have said the same thing. Isaac has recommended a standard rate of 22-24 per cent in order to ensure that states do not lose out on revenue.[315] The situation at the time of writing this, in August 2016, seems to suggest that a standard rate of 20 per cent or more will be arrived at.

To this, Arvind Subramanian, the Chief Economic Adviser to the Finance Ministry, has said that a standard rate of "higher than 18-19 per cent will stoke inflation".[316] This is primarily because the tax on services, which is currently at 15 per cent, would see a huge jump.

It remains to be seen what rate the GST council finally comes around to. Take the case of small cars. Currently, an excise duty of 12.5 per cent is levied on them. Then there is the state-level sales tax (or VAT) of 12.5-14.5 per cent. The Union Budget for the year 2016-2017 added a 1 per cent infrastructure cess on cars. Over and above all this, some cities charge an octroi as well. Hence, we are talking about an effective tax rate of around 28 per cent. If the standard rate of GST is 18-19 per cent, then the prices of small cars should come down.[317]

CRISIL Research expects the prices of small cars to come down by about 10 per cent.[318] But this is assuming that the state finance ministers come around to the idea of an 18 per cent standard rate of GST. As the senior journalist and editor R Jagannathan put it in a

column: “Why would any sensible finance minister at the Centre or states reduce this to 18 per cent?”[319] This will continue to remain a tricky issue, given that states need to subsume a whole host of taxes under the GST and are likely to demand (in fact, they are already demanding) a standard rate of 20 per cent or more.

Also, there is the question of how states will compensate municipal corporations for the taxes that are subsumed under the GST. Take the case of octroi. The Brihanmumbai Municipal Corporation makes a lot of money through octroi. If the GST were to become the order of the day, then octroi would get subsumed under it.

As Jagannathan puts it: “The Mumbai Municipal Corporation’s Octroi collections annually are in the range of Rs. 7,000-8,000 crore. Will GST collections in Maharashtra be enough to finance this revenue loss?”[320] This is a question worth asking.

Furthermore, the GST system, as it has been envisaged, will need a solid information technology backbone. This information technology system would essentially lead to a lot of lower level bureaucracy, which runs India’s indirect tax system, becoming useless. (Think of all those employees manning check-posts on state borders, for one.)

While the government does not fire employees, a move towards the GST would lead to the income from corruption for the lower level bureaucracy coming down. And this is unlikely to go down well with them. They, as always, remain in a position to create problems.

Also, in an interaction with a senior economist, who is closely involved with the GST, in July 2016, I was told that the state-level bureaucracy remains unprepared for the implementation of the GST. The fact that the GST is a destination-based tax and not an origin-based one, which is one of its core points, remains unclear to many of them.

Given that there is the risk of the revenues of the state governments falling for the first few years after the GST is introduced, for the first five years the union government will have to compensate the states for the loss of revenue arising due to the GST. This is the known unknown that can really create a problem. If the compensation demands from states are more than what is expected, the fiscal deficit of the central government can shoot up.

In this scenario, achieving the fiscal deficit target that the Finance Minister, Arun Jaitley, has set for the government will become difficult. In the budget speech made in February 2015, Jaitley had said that the government would achieve a fiscal deficit of 3.5 per cent of the GDP in 2016-17 and 3 per cent of the GDP in 2017-18. Running up a higher fiscal deficit will have its own set of repercussions.

****

As we have already seen, the GST is basically a self-policing system and makes the entire system more transparent. The Subramanian Committee report points out that the GST "is a stark example of a tax believed to facilitate enforcement through a built-in incentive structure that generates a third-party-reported paper trail on transactions between firms, which makes it harder to hide the transaction from the government."

This basically ensures that the tax collected by the government goes up. As the analysts Saurabh Mukherjea, Ritika Mankar Mukherjee and Sumit Shekhar of Ambit Capital point out: "Cross-country evidence suggests that the introduction of [the] GST boosts the tax-to-GDP ratio by 1-2 per cent points."[321] The analysts feel that the GST will boost tax collection in India by bringing the unorganised sector, which accounts for 59 per cent of India's economy, under the purview of taxation.

While the rate of inflation is initially expected to go up, over the longer term the inflation should come down as the cascading effect of indirect taxes is done away with and the cost of doing business comes down. How has the global experience been on this front? In New Zealand and Canada, the introduction of a single GST brought down inflation. But that wasn't the case in Australia and Thailand. In these two countries, inflation went up, but this was more due to domestic supply constraints. Once these factors were adjusted for, inflation in Australia and Thailand was also lower after the implementation of the GST.[322]

And what about economic growth? Does the GST add to economic growth? According to Finance Minister Jaitley, speaking in April 2015: "This [the GST] has the potential to push India's GDP by one to two per cent."[323]

The passage of the GST adding to economic growth is something that has been reiterated over and over again by those who have been

in favour of it. As far as Jaitley's statement is concerned, it was probably made on the basis of a December 2009 report brought out by the National Council of Applied Economic Research (NCAER). In this report, NCAER said that, other things remaining the same, the implementation of the GST is likely to push up India's GDP "somewhere within a range of 0.9-1.7%".[324]

The evidence for the GST increasing GDP growth (or economic growth) is at best sketchy. The cross-country evidence seems to suggest that the GST brings down the inefficiencies of the indirect tax system as it was prevailing before the GST was introduced. But there is no conclusive evidence for the introduction of the GST leading to faster economic growth.[325]

To conclude, there are many good things about the GST. Nevertheless, it is not a done deal yet and a few major issues remain which will continue to test the Modi government in the days to come. Also, the success of the GST will depend on the extent to which the new system limits the vagaries of the current Big Government in India's indirect tax system.

Furthermore, it is not the be-all and end-all that the media is making it out to be. It is just one of the factors that will help to set India right in the years to come.

****

In this last section to this chapter, let's briefly look at some of the other factors that need to be set right if *Make in India* is to become a success.

a) **Labour Laws:** This is one reform that the government needs to push through seriously. The trade unions will of course create a lot of problems. And no government till date has been able to take them on. But if *Make in India* has to happen, India's labour laws need to be reformed big time and at a rapid pace. Only then will the smaller Indian firms become bigger and, in the process, create more jobs in the organised sector than currently is the case. This is discussed in detail in Chapter 7. The current Modi government has only taken some baby steps towards this.

b) **Land Acquisition:** The way things currently stand, it is next to impossible right now to acquire land in India to set up a

factory. And setting up a factory is not possible without the acquisition of land. The issue has become too complicated over the years, given that, until 2013, the Land Acquisition Act of 1894 was the law of the land. This is discussed in detail in Chapter 8.

As mentioned earlier, a new window of opportunity has opened up thanks to China. With Chinese labour costs going up, industry is moving out of China in order to stay compatible on the price front. Until now, these industries and jobs have moved to countries like Vietnam, the Philippines, Cambodia and Bangladesh. If these industries are to move to India, then a focused effort is needed in sorting out issues like land acquisition and labour laws in order to promote manufacturing and industry within India.[326]

c) **Improvement of Physical Infrastructure:** Globally, when it comes to cost, India competes well with other countries with major exports. But cost is not the only factor that encourages entrepreneurship and manufacturing. In fact, the two most consistent predictors of overall entrepreneurship in an area are local education levels as well as quality of the local physical infrastructure.[327] As E Ghani, WR Kerr and SD O'Connell write in a research paper titled 'Who Creates Jobs?': "Goods and services cannot be produced and delivered without roads, electricity and telecommunication."[328]

> In fact, cities and states that have embraced entrepreneurship have created more jobs and, at the same time, experienced faster regional growth. The same is true for India as well. Economic growth has been strongest in the regions that have exhibited high rates of entrepreneurship.[329]
>
> For entrepreneurship to flourish, India needs better physical infrastructure than it currently has. This means better roads, better railways and better ports. Take the case of Indian ports. They play a crucial role in Indian trade. They handle 95 per cent of the merchandise trade by volume. But the turnaround time of most Indian ports, except for a few private ports, continues to remain high. Turnaround time is essentially the time taken by a ship between berthing at a port and leaving it, with loading and unloading, and getting the ship ready to leave, happening in between.

The Pipavav port has the fastest turnaround time, of 0.5 days, among Indian ports. The Mundra port, with a turnaround time of 1.5 days, comes in next. Other ports like Chennai, Paradip, Mumbai, Kolkata and Kandla take 2.1 days, 2.6 days, 2.9 days, 3 days and 4 days, respectively.[330] This needs to improve in the days to come.

Also, despite the fact that India has 187 minor ports and 12 major ports, almost every sea-based cargo that leaves India or is coming to India is first trans-shipped to mega-hubs like Colombo or Singapore.[331]

As far as the Railways is concerned, it has more or less been ignored for a long period of time. In fact, since the 1990s, many railway ministers from the Eastern part of the country basically used the Railways as a job-creation exercise in their respective states.

In fact, since Independence, most of the investment in the Indian Railways has been incremental in nature. Both expansion of routes and technological upgradation have been limited. The current Modi government is trying to correct this by investing more in the Railways. Between 2009-2014, the average capital expenditure of the Railways had stood at Rs. 48,100 crore and grew by around 8 per cent per annum. In 2016-2017, the capital expenditure of the Railways has been budgeted at Rs. 1,21,000 crore.[332]

As the current Railways Minister, Suresh Prabhu, said in the February 2016 Railways Budget speech: “This year, our investment would be close to double of the average of previous years – a feat never achieved earlier.”

Over the years, the freight operations of the Railways has subsidised its passenger operations. This has meant that the government has increased freight prices without increasing the ticket prices for passengers. This has led to a situation wherein the transportation of goods has moved more towards road transport, as the freight pricing of the Railways has become uncompetitive.

As the *White Paper on the Indian Railways*, released in February 2015, points out: “Railway expenditure as a

percentage of [the] transport sector expenditure used to be about 56 per cent in [the] 7th Plan (1985-90). It has reduced to 30 per cent in [the] 11th Plan (2007-12)." Table 6.5 shows a similar trend.

Table 6.5: Share of the transport sector in the overall GDP (in %).

	2008-09	2009-10	2010-11	2011-12	2012-13 (1st revised estimate)
Overall Transport	6.6	6.6	6.5	6.6	6.7
Railways	1	1	1	1	0.9
Road Transport	4.7	4.7	4.6	4.8	4.9
Water Transport	0.2	0.2	0.2	0.2	0.2
Air Transport	0.2	0.2	0.3	0.3	0.3
Services Incidental to Transport	0.4	0.4	0.4	0.4	0.4

Source: *White Paper on the Indian Railways*, 2015.

One thing that is holding back the freight business of the Railways is the slow speed of freight trains. In fact, how slow their speed is can be made out from the fact that Prabhu, in the February 2016 Railways Budget speech, said that the plan is to increase the average speed of freight trains to 50 kilometres per hour. Currently, freight trains use the same tracks as passenger trains, and this slows them down.

In order to get around this problem, the Railways is trying to build Dedicated Freight Corridors for the freight trains. As Prabhu said during the course of the Railways Budget speech: "The Dedicated Freight Corridor project, the largest infrastructure project in the country, is gaining momentum. I am happy to inform the House that, before this financial year closes, almost all the contracts for civil engineering works would have been awarded. Since I assumed office, contracts worth Rs. 24,000 crore have been awarded, against Rs. 13,000 crore worth of contracts in the last 6 years."

Prabhu also proposed to "take up the following freight corridors: North-South connecting Delhi to Chennai, East-West connecting Kharagpur to Mumbai, and East Coast connecting Kharagpur to Vijayawada". This is important, given that freight customers are the mainstay of the Railways and bring in over Rs. 1,00,000 crore of revenue during the

course of a year.[333] Their major problem is the slow speed of freight trains, given the congestion on all major railway routes. This is being addressed.

In fact, once the dedicated freight corridors for freight trains come up, it will ease up congestion on the current railway routes and, in the process, passenger trains are also likely to get faster. Prabhu, in his budget speech, aimed at increasing the speed of mail and express trains to 80 kilometres per hour on an average.

For this expansion and overhauling of the Indian Railways, the Railways will borrow Rs. 1.5 lakh crore from the Life Insurance Corporation of India on extremely favourable terms.[334]

So that leaves us with roads. India's total road length has increased from 4 lakh kilometres, as on March 31, 1951, to 52.3 lakh kilometres, as on March 31, 2013, growing at an annual rate of 4.2 per cent. In fact, India's road density, at 1.59 km/sq. km of area was "higher than that of Japan (0.90 km/sq. km), the USA (0.67 km/sq. km), China (0.44 km/ sq. km), Brazil (0.19 km/sq. km) and the Russian Federation (0.08 km/sq. km)".[335]

But this statistic is misleading, given that only 60.6 per cent of India's roads are paved. And this proportion is "much lower as compared to the UK, France, Korea, Russia and China".[336] Take a look at Table 6.6. It presents a breakdown of the various kinds of roads that India has.

Table 6.6: Types of roads in India and associated statistics.

Category of Road	Length of Roads (km)	Share in Total Road Length (%)*
National Highways (NHs)	79,116	1.5
State Highways (SHs)	1,69,227	3.2
Other Public Works Department (OPWD) Roads	10,66,747	20.4
Rural Roads	31,59,639	60.4

Urban Roads	4,46,238	8.5
Project Roads	3,10,955	5.9
Total	**52,31,922**	

* The total doesn't add up to 100 due to rounding-off errors.

Source: *Basic Road Statistics of India,* 2012-2013.

As is clear from Table 6.6, rural roads form 60.4 per cent of the total roads, and much of that is unpaved. Furthermore, the National Highways form only 1.5 per cent of the total roads. Nevertheless, they carry around 40 per cent of the total traffic.[337] Given this, it is not surprising that they are congested. This congestion slows down the movement of goods across India.

In fact, most of the goods are moved across India through road transport. In 1950-1951, the Railways accounted for nearly 90 per cent of the total transport. By 2011-2012, roads accounted for 65 per cent of the total transport. In fact, the roads overtook the Railways sometime in the early 1990s. This was primarily on account of the Railways being unable to provide the kind of door-to-door service that road transport could. Furthermore, with the Railways subsiding passenger services through their freight operations, road transport eventually turned out to be cheaper.[338]

Interestingly, the National Transport Development Policy Committee of 2014 expects the Railways to increase its share in the years to come and, by 2031-2032, the ratio of Railways to roads, when it comes to freight movement, is expected to be 50:50.

Nevertheless, as things stand, trucks currently move the bulk of India's goods. But, given the congestion on India's national highways, they move at very slow speeds. Over and above the congestion, inter-state check-posts also slow down trucks to an average of around 300 kilometres per day. Electronic tolling is the need of the hour (which would again bring down Big Government).[339]

In order to decrease congestion, the single- or double-lane highways need to be converted into four- or six-lane roads. Two of the biggest hindrances to road construction are land acquisition and environmental clearances.[340]

What does not help is the fact that truck drivers are badly paid. Hence, they drive at a slow speed to save on diesel and make some money in the process. Only truck drivers engaged for delivering fruits or vegetables or hired by courier com panies are given enough diesel and paid a reasonable salary, which incentivises them to drive at a fast speed.[341]

The Narendra Modi government has taken up road construction across the country with great zeal. In July 2016, the Road Transport and Highways Minister, Nitin Gadkari, told American investors in Washington: "The pace of road construction has accelerated to an all-time high of 20 kilometres per day, and next year, we plan to increase it to 41 km per day."[342]

Other than improving physical infrastructure which leads to the easier movement of goods, the construction of roads also creates many low-skill jobs, precisely the kind of jobs that cater to India's natural competitive advantage of having a surplus of low-skilled labour.

As the annual report of 2015-2016 of the Ministry of Road Transport and Highways points out:

> During April 2014 to January 2016, about 9,280 kilometres of road length (including 3,034 km of National Highways) have been constructed by the Ministry of Road Transport and Highways, which is likely to generate employment of about 3.78 crore man-days in total…. [The] Ministry is aiming for the construction of 10,000 kilometres of road projects in 2016-2017, which [is] likely to generate employment of about 4 crore man-days.

The fast pace of road construction needs to be maintained in the years to come if a programme like *Make in India* has to see some success.

d) **Savings:** Between 2007 and 2013, as inflation remained high, this led to the domestic savings in India coming down. The savings peaked at 36.8 per cent of the GDP in 2007-2008. By 2012-2013, it had fallen to 30.1 per cent of the GDP. Between 2005-2006 and 2007-2008, the average household financial savings had stood at 11.6 per cent of the GDP. In 2009-2010, it rose to 12 per cent of the GDP. After that, it started to fall, and by 2011-2012, it had fallen to 7 per cent of the GDP. Since then, the figure has gone up only marginally.

In fact, India's domestic savings as a percentage of its GDP, in comparison to other countries in Asia which have a record of growing at a very fast pace, is low. It is much lower than China's, at 51.8 per cent; Singapore's, at 52.1 per cent; Malaysia's, at 35.5 per cent; and South Korea's, at 34.1 per cent.[343]

Ultimately, it is domestic savings which will finance the *Make in India* programme. For that to happen, the domestic savings need to be at 36 per cent of the GDP between 2017-2018 and 2021-2022, and rise to 41 per cent of the GDP between 2027 and 2032. Domestic savings are made up of both physical savings in the form of land, homes and gold, and financial savings, which are basically investments in various financial instruments. Household financial savings need to jump to 11.4 per cent of the GDP between 2017-2018 and 2021-2022 and 13 per cent of the GDP between 2027-2028 and 2031-2032.[344]

This will only be possible with sustained reduction in the rate of inflation. This sustained reduction in the rate of inflation would lead to low nominal interest rates. Nevertheless, low nominal interest rates should be accompanied by positive real interest rates, i.e., the rate of interest should be higher than the rate of inflation.

Through much of the period between 2007-2008 and 2013-2014, the rate of inflation was higher than the rate of interest. This led to people's financial savings falling and their looking at other modes of investment other than financial savings.

If the government wants to control the overall inflation, it first needs to control the food inflation. And for that to happen, a thorough reform of India's current agricultural policy is needed. Big Government in India's agriculture needs to come down. Until now, the government has primarily concentrated on acquiring foodgrains, i.e., rice and wheat. This has led to the overproduction of these grains at the cost of pulses, fruits and vegetables, which India is now eating more and more of. The demand for pulses, fruits, vegetables, eggs and meat will continue to grow at a much faster pace than the demand for foodgrains, especially as income levels increase and people eat better. This is something that government policies haven't taken into account until now. If food inflation has to be reined in, the government policies need to account for this factor as well. We will discuss this in detail in Chapter 12.

Furthermore, the trouble is that every government wants low interest rates all the time, given that it is the biggest borrower in the financial system. But that is not good for the nation if a reasonable level of domestic savings, which are necessary to finance a programme like *Make in India*, needs to be built.

Also, the total fiscal deficit (central government fiscal deficit plus the fiscal deficits of the state governments) needs to come down through the curtailment of expenditure. (Did we say Big Government?) Every time the government goes overboard while borrowing, it takes away money from the private sector. Also, this crowding out pushes up interest rates. India has been trying to move towards a fiscal deficit target of 3 per cent of the GDP for many years. In fact, before it does that, it needs to first start calculating its fiscal deficit properly, which I will discuss in Chapter 10.

Another thing that is needed to increase domestic savings is to increase financial inclusion. This the government is currently doing through the Jan Dhan Yojana programme. As of early August 2016, 23.62 crore bank accounts have been opened under the Jan Dhan Yojana. The accounts have a balance of Rs. 41,723 crore. This is a huge jump from the 5.3 crore bank accounts in September 2014. Nevertheless, a lot still needs to be done on this front. Despite this success, the penetration of basic savings accounts remains low in many states.

What also does not help is the fact that only 27 per cent of villages have a bank within a distance of 5 kilometres. This means that last-mile connectivity is a problem. Things need to improve on this front if the domestic-savings-to-GDP ratio has to go up, so that there is enough money going around to finance a programme like *Make in India*.

To conclude, for the *Make in India* programme to be successful, the Modi government needs to hold back Big Government in many, many areas and allow the private sector to flourish.

[xi] Interestingly, the Chinese female labour force participation rate has also been falling. World Bank data suggests that it had stood at 73 per cent in 1990 and at 64 per cent in 2014.

[xii] In this case, the term 'secular' has been used to talk about trends which remain consistent over a long period of time.

[xiii] Data taken from the Garv Dashboard (garv.gov.in/dashboard) of the Central government.

7.INDIA’S HOTEL CALIFORNIA PROBLEM

> Is it possible that our best intentions for labour are not actually met by laws that sound progressive on paper but end up hurting the very workers [that] they are meant to protect?
>
> – Manmohan Singh, November 2010

The National Manufacturing Policy of 2011 estimated that the number of Small and Medium Enterprises (SMEs) in India stood at over 26 million (2.6 crore) units. They employed around 59 million (5.9 crore) people. This means that any SME, on an average, employed 2.27 individuals.

The Boston Consulting Group estimated that 36 million (3.6 crore) SMEs (or what it calls micro-SMEs) employ over 80 million (8 crore) employees. This means that any SME, on an average, employs 2.22 individuals. These firms are responsible for 45 per cent of the manufacturing output of the country.[345]

What this clearly tells us is that the size of an average Indian SME is small, in fact, very small. These firms basically employ the owner and one more person, on an average. Interestingly, nearly two-thirds of these firms are own-account enterprises without any hired workers. These firms are highly unproductive and are unlikely to create any employment. As the economist Vijay Joshi writes in *India's Long Road*: "The vast majority of owners are not 'capitalists in waiting' but people who would gladly switch to decent employment if it were available." Another 15 per cent of firms employ less than six workers each. These firms are also highly unproductive.[346]

Hence, if jobs need to be created, firms with greater than ten employees need to become bigger and employ more people.

In fact, there are more such datasets showing the essential smallness of Indian firms. As the economist Pranab Bardhan writes in *Globalisation, Democracy and Corruption*: "Take the highly labour-intensive garments industry, for example. A combined dataset [of both the formal and informal sectors] shows that about 92 per cent of garment firms in India have fewer than eight employees."[347]

The economists Jagdish Bhagwati and Arvind Panagariya offer a lot of data around the small size of the average Indian firm in their book *India's Tryst with Destiny*. The trouble is that some of this data is dated, but that is a standard problem in trying to write anything detailed on Indian economics. More often than not, there isn't much recent data going around.

In 2005, 84 per cent of the workers in Indian manufacturing were employed in firms with 49 or less workers. Firms with 200 or more workers, defined as large firms, made up for only 10.5 per cent of the manufacturing workforce. Now compare that to China, where small- and large-scale firms employed 25 per cent and 52 per cent of the workers, respectively. In a labour-intensive sector like apparel, 92.4 per cent of the workers in India work with small firms, which have 49 or less workers. Again compare this to China, where large and medium firms make up around 87.7 per cent of the employment in the apparel sector.[348]

In fact, when it comes to textiles, even Bangladesh is doing better than India. As Mihir S Sharma writes in *Restart*: "Before the expansion of trade, thanks to new international rules in the twenty-first century, India made $10 billion from textile exports and Bangladesh, $8 billion. Today, India makes $12 billion—and Bangladesh $21 billion."[349]

So what happened here? The textiles industry, explains Sharma, needs to turn around big orders quickly and efficiently. This means that really long assembly lines are needed. As he writes: "100 people can sequentially work to make a pair of trousers in the least time. In Bangladesh, the average number of people in a factory is between 300 and 400; in the South Indian textiles hub of Tirupur, it's around 50."[350]

India has very few factories that actually employ more than 500 people.[351] Once again, compare that with China. The largest garment manufacturing factories in China have a workforce of 30,000. In fact, even Bangladesh has garment manufacturing units with 10,000 workers. In India, the numbers rarely go beyond 1,000 workers. In fact, in India, the garment manufacturers prefer to split their workforce into many units instead of employing a lot of workers at one unit. This basically comes from the fear of not being able to retrench workers.[352]

So, there is enough evidence going around which tells us very clearly that the average Indian manufacturing firm is very small. In many cases, it employs even less than ten people. Jobs are created when small firms start to grow big and recruit more people. As an OECD (Organisation for Economic Co-operation and Development) research paper points out:[353]

> SMEs (small- and medium-sized enterprises) account for 60 to 70 per cent of jobs in most OECD countries, with a particularly large share in Italy and Japan, and a relatively smaller share in the United States. Throughout, they also account for a disproportionately large share of new jobs, especially in those countries which have displayed a strong employment record, including the United States and the Netherlands. Some evidence points also to the importance of age, rather than size, in job creation: young firms generate more than their share of employment.

So what is it that is holding back small Indian businesses from growing bigger? Labour laws is the simple answer. The interesting bit is that the country has so many of them that nobody really knows how many. I might be exaggerating a little here, but I hope, dear reader, that you get the drift.

When it comes to law making in India, there are three lists: union, state and concurrent. The central government can make laws on areas that come under the union list. State governments can make laws on areas that come under the state list. Both union and state governments can make laws on areas that come under the concurrent list.

Labour is split between the union and concurrent lists. The regulation of labour comes in the union list. More specifically, industrial disputes, trade unions and the welfare of labour, including conditions of work, provident fund, employers' liability, workmen's compensation, and invalidity, old age pension and maternity benefits come in the concurrent list. Hence, the central government and state governments can legislate on labour. Many state-level laws are essentially similar to laws enacted by the central government, but with minor variations.[354]

Given that both the central government and the state governments can legislate on labour, this has led to a surfeit of labour laws. The National Manufacturing Policy of 2011 estimates that, on an average, a manufacturing unit needs to comply with nearly 70 laws and regulations. Of course, all these laws are not labour laws. At the same time, these units sometimes need to file as many as 100 returns a year.

The 2013-2014 annual report of the Ministry of Labour lists 44

Acts in the area of labour which have been passed by the central government. The veteran lobbyist, Amit Mitra, who is now the Finance, Industries and Commerce Minister of the state of West Bengal, estimates that there are another 150 state-level labour laws in India.[355]

Another estimate made in a research paper published by the International Labour Organisation put the total number of state-level labour laws at 160. As the research paper points out: "The state laws mostly supplement and sometimes address specific local issues, but are not in conflict with [the] central laws."[356]

This puts the total number of labour laws at around 200.

The trouble is that there are so many laws out there that it is difficult for a firm to operate without breaking some law or the other. This essentially ensures that even firms which have the chance of growing bigger end up remaining small.

Furthermore, the surfeit of laws keeps the smarter lot away from entrepreneurship. As the National Manufacturing Policy of 2011 points out: "This kind of compliance burden puts off young entrepreneurs and they are not willing to take up an entrepreneurial role. As a result, a large number of people who could have been self-employed and would [have] contribute[d] to further employment and enhance[d] economic activity end up accepting jobs much below their potential."

****

A firm comes under the ambit of the Factories Act of 1948 the moment it employs 10 or more workers "on any day of the preceding twelve months" and "in any part of which a manufacturing process is being carried on with the aid of power". If the manufacturing process is not carried out with the aid of power, then the firm needs to have employed 20 or more workers on any day of the previous 12 months to come under the ambit of the Factories Act.

Power is essentially defined as "electrical energy or any other form of energy which is mechanically transmitted and is not generated by human or animal agency".

Here are some of the requirements of the Factories Act:[357]

a) No adult worker shall work in a factory for more than 48

hours in any week.

b) The total amount of overtime work done in a quarter (a period of three months) cannot exceed 50 hours. The overtime kicks in if the worker works for more than nine hours on a given day or more than 48 hours in a given week. Section 59 of the Act states: "… [when] a worker works in a factory for more than nine hours in any day or for more than forty-eight hours in any week, he shall, in respect of overtime work, be entitled to wages at the rate of twice his ordinary rate of wages."

c) The employment of children under 15 years of age is not allowed.

d) Women are allowed to work in a factory only between 6 am and 7 pm.

e) Separate restrooms should be provided for men and women.

f) A suitable place for keeping clothes which are not worn during working hours needs to be provided. There needs to be a place for the drying of wet clothes as well.

g) A sitting place needs to be provided for workers who work in a standing position, so that they can take a break whenever the work permits.

h) In every factory, a first-aid box needs to be kept. One first-aid box needs to be maintained for every 150 workers. Furthermore, a separate person who holds a certificate in first aid which is recognised by the state government needs to be in charge of the first-aid box and needs to be readily available during the working hours of the factory.

i) The factory needs to be kept clean as well as whitewashed or colour-washed. The whitewashing or colour-washing must be carried out at least once in every period of fourteen months.

The Factories Act generates a lot of paperwork as well. The manager of every factory needs to maintain a register of all the workers. This is to be available at all times during working hours and needs to have the following details: (a) the name of each adult worker in the factory; (b) the nature of his work; (c) the group, if any, in which he is included; (d) where his group works on shift, the relay to

which he is allotted. Also, no worker is allowed to work in a factory unless his name has been entered in the register.

A register also needs to be maintained for all the cleaning, floor washing and whitewashing or colour-washing that is carried out. The factory must also maintain a register for leaves granted to workers and for any accidents that might have happened.

In fact, the Factories Act is not the only labour law which mandates the compulsory maintenance of registers. Other laws mandate the same. This increases the burden of small and medium enterprises. It has also led to the inspector raj, which seems to have replaced the licence raj as the number one problem of Indian businesses.

In fact, Gurcharan Das, in his book *India Grows at Night*, recounts the story of an entrepreneur friend named Navin Parikh, who runs a factory near Ajmer which makes sophisticated parts and equipment for suppliers to the world's defence industries. This is how Das recounts Navin's experience: "'Not a week goes by,' Navin said, 'without an inspector from some department or the other coming for his *hafta vasooli* (weekly bribe). Labour, excise, fire, police, octroi, sales tax, boilers and more – we have to keep all of them happy. Otherwise, they make life hell. More than 10 per cent of my costs are in 'managing the system.'"[358]

Navin has to deal with, on an average, seventeen inspectors (of course all of them are not labour inspectors or factory inspectors) who have the power to close down his business on some pretext or another.[359]

In fact, in December 2014, there was a positive development on this front. Firms with less than 40 workers no longer needed to maintain a register or furnish returns under 16 Scheduled Acts.[360]

Also, when it comes to the Factories Act, the economies of scale really don't kick in. As the number of workers working in the factory goes up, so do the requirements that need to be fulfilled. If the number of workers is more than 250, a canteen and cold water during the summer season need to be provided. In every factory with more than 150 workers, a suitable lunchroom as well as restrooms need to be provided.

Furthermore, in every factory with more than 250 workers, it is

required that the sanitary pans of latrines and urinals be thoroughly washed and cleaned at least once in every seven days with suitable detergents or disinfectants, or with both. (Yes, the Act goes into this level of detail.)

If the factory has more than 500 workers, an ambulance room with the right equipment and medical and nursing staff needs to be provided for. If the factory has more than 30 female employees, a crèche needs to be provided for.

In fact, Section 20 of the Factories Act has even got details about spittoons. Here are the four clauses of the Section:

> (1) In every factory, there shall be provided a sufficient number of spittoons in convenient places, and they shall be maintained in a clean and hygienic condition.
>
> (2) The State Government may make rules prescribing the type and numbers of spittoons to be provided and their location in any factory and provide for such further matters relating to their maintenance in a clean and hygienic condition.
>
> (3) No person shall spit within the premises of a factory except in the spittoons provided for the purpose, and a notice containing this provision and the penalty for its violation shall be prominently displayed at suitable places on the premises.
>
> (4) Whoever spits in contravention of sub-section (3) shall be punishable with a fine not exceeding five rupees.

Yes, you read that right! The Factories Act even specifies that a worker who spits in the factory and does not spit into the spittoon should be fined Rs. 5.

It is precisely requirements like these that give inspectors the ammunition to hassle manufacturing entrepreneurs. As Trilok Singh Papola writes in a research paper titled 'The Role of Labour Regulation and Reforms in India: Country Case-study on Labour Market Segmentation': "Some details of processes and methods… leave room for harassment and extraction of monetary or other favours by unscrupulous inspectors."[361]

The spittoon part apart, many of the requirements listed above seem to be necessary. But, at the same time, one needs to understand that perfect is the enemy of good. Interestingly, the now much-

maligned PC Mahalanobis thought along similar lines.

The economist TN Srinivasan quotes Mahalanobis as saying:[362]

> … in certain respects, welfare measures tend to be implemented in India ahead of economic growth, for example, in labour laws, which are probably the most highly protective of labour interests, in the narrowest sense, in the whole world. There is practically no link between output and remuneration; hiring and firing are highly restricted. It is extremely difficult to maintain an economic level of productivity, or improve productivity. At [the] early stages of development in all countries, there has been a real conflict between welfare measure[s] and economic growth. Japan is an outstanding example; the concept of minimum wages was introduced only about 10 or 12 years ago, when [the] per capita income had reached the level of $250 or $300 per year; and minimum wages were fixed more or less at actual average levels. In India, with a per capita income of only about $70, the present form of protection of organised labour, which constitutes, including their families, about five or six per cent of the whole population, would operate as an obstacle to growth and would also increase inequalities. It is a serious problem not only in India but in other under-developed countries.

The Factories Act has essentially ensured that the number of people employed by average Indian manufacturing firms continues to be small. It explains why the firms operating in garment manufacturing, which have the potential to employ a lot of workers, continue to employ fewer than eight employees.

If manufacturing firms are to grow bigger, it is necessary that changes be made to the Factories Act. Currently, firms using power and employing 10 or more workers come under the ambit of the Act. This number needs to go up, to perhaps 50, or maybe even 100, in order to ensure that firms grow bigger.

Also, some other changes need to be made as well. Take the case of overtime wages. Currently, Section 59 of the Act states that overtime wages need to be paid at twice the normal rate. This is totally out of line with the way things are internationally across countries. The International Labour Organisation (ILO) stipulates a minimum overtime of 125 per cent of the normal rate. Countries like China, Germany and the United Kingdom do not have a minimum statutory overtime rate. In Japan and France, the overtime rate is at 125 per cent of the normal rate. In Brazil, South Korea and the United States, the overtime rate is at 150 per cent of the normal rate.[363] What this clearly tells us is that the overtime rate in India, as per the Factories Act of 1948, is clearly an outlier and needs to be brought down.

****

Another draconian law which ensures that small firms continue to remain small is the Industrial Disputes Act of 1947. The Act applies to industrial establishments with 50 or more workers. The Act, when it was first introduced, did not prevent firms from retrenching workers or shutting down unprofitable businesses as long as they had notified the workers and the trade unions of these changes in advance.[364]

Interestingly, the provisions related to the payment of compensation to workers who are laid off or retrenched were introduced in 1953. It is important to explain here the difference between a lay-off and a retrenchment. A firm lays off a worker when the demand for the product that the firm manufactures is slack. The intention is to re-hire the worker when the demand picks up once again. Retrenchment is what in this day and age is referred to as firing a worker. In 1964, the payment of compensation was fixed at 15 days of average pay for every year of service that had been put in.[365]

The Act was amended under pressure from the trade unions first in 1976 and then in 1982. In 1976, a Chapter V B was introduced into the Act. The 1976 amendment essentially required that, if a firm employed 300 or more workers, then, in order to lay off or retrench workers or shut down, it needed the prior permission of the government. In 1982, the threshold, if the firm wanted to shut down, was reduced to 100 workers.[366] A firm having more than 100 workers needed the prior permission of the government to shut down.

In 1984, the threshold was reduced to 100 workers if the firm wanted to either shut down or even if it wanted to lay off or retrench workers. The period of notice was increased to 90 days from the earlier 60 days.[367]

In fact, what this did was that it led to situations wherein even if a firm employing more than 100 workers had to retrench a single worker, it needed the permission of the local labour commissioner.[368] Interestingly, even when the services of a single worker have to be terminated, the dispute settlement procedures apply. This involves a three-stage process (consultation, conciliation and adjudication, or arbitration). Workers tend to prefer adjudication, given the delays inherent in the Indian legal system. The average time taken to complete this process is ten years.[369]

After this change was introduced in the 1980s, applications for lay-offs or retrenchments made to the government seldom succeeded. The

firms coming under the purview of the Industrial Disputes Act obviously knew that. Hence, they did not make too many such applications anyway. As the Indian Labour Year Book for 1992 points out: "Retrenchment and Lay-off: During the period January-August, 1992, four proposals, two each for retrenchment and lay-off were received for consideration by the Ministry of Labour. One proposal seeking permission for retrenchment was rejected, whereas the other remained under [the] consideration of the Government. One proposal for lay-off was withdrawn, while the other was found to be not maintainable."[370]

How have things looked in more recent times? In 2009, 68 units were allowed to close down. In 2010, the number fell to 41.[xiv] The total number of units carrying out lay-offs declined from 49 to 45. The total number of units that were allowed to retrench workers fell from 29 to 13.[371]

In 2012, 46 units were allowed to close down, 19 units were allowed to retrench workers and 8 units to lay off workers.[372] While the numbers have shown an improvement between 1992 and 2012, they are still a joke. In a country as big as India is, only 46 units were allowed to shut down in 2012.

Of course, firms got around this in various ways. They declared a lock-out on certain grounds. Or, at other times, they announced the closing down of the firm for reasons beyond their control.[373] Interestingly, India alone mandates that firms need government permission in order to lay off, retrench or shut down if a firm happens to employ a hundred or more workers.[374]

If entrepreneurs are not allowed to close down unviable enterprises, the capital which could have been used for something else remains stuck. Furthermore, the lack of an exit option remains a major roadblock to encouraging people to take on entrepreneurship. This also ensures that firms continue to remain small in size. Entrepreneurs limit their ambition and choose to not grow beyond a certain size.

The Economic Survey of 2015-2016 discussed this problem in great detail by comparing it to the *Chakravyuha* episode from the Mahabharata. The second chapter of the Survey of 2015-2016 makes a very interesting point: "The *Chakravyuha* legend from the Mahabharata describes the ability to enter but not exit, with seriously adverse consequences. It is a metaphor for the workings of the Indian

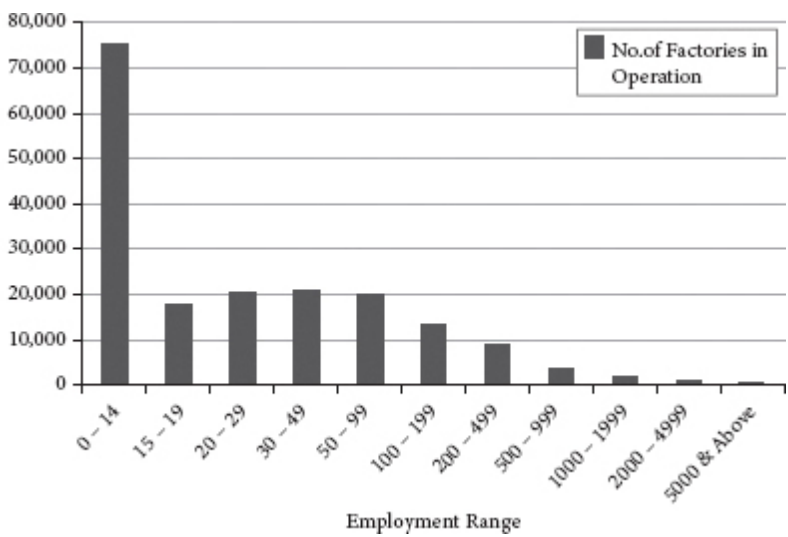
economy in the 21st century."

What is meant here is that Indian companies continue to operate, irrespective of the fact of whether they make money or not. In a free market, as firms innovate and grow, they end up pushing out other firms, which then shut down. But that doesn't seem to be happening in India.

As the Survey points out: "In principle, productive and innovative firms should expand and grow, forcing out the unproductive ones. So surviving firms should be much larger than new ones…. In the US, the average 40-year-old plant is 8 times larger (in terms of employment) than a new one. Established Mexican firms are twice as large as new firms. But in 2010 India, the average 40-year-old plant was only 1.5 times larger than a new one."

If the factory size continues to remain small, the number of people an average factory employs will also continue to remain low. This is something that comes out very well through the Annual Survey of Industries (2013-2014). Take a look at Figure 7.1.

Figure 7.1: Comparison of factories according to the size of their workforce.



Source: Annual Survey of Industries (2013-2014).

As can be seen from Figure 7.1, the maximum number of factories employ less than 15 people, and there are barely any factories in operation which employ more than 1,000 people. This shows us the sad state of the Indian manufacturing sector, given that "there are not enough big firms and too many firms that are unable to grow, the

latter suggesting that there are problems of exit".[375]

What this basically means is that firms which should be shut down are not shutting down due to various reasons, which include the Industrial Disputes Act. Hence, there is an exit problem, a situation that is best expressed by the song *Hotel California*, sung by The Eagles: "*You can check out any time you like / But you can never leave*."

As the Survey points out: "India, unlike many countries, seems to have a disproportionately large share of inefficient firms with very low productivity and with little exit." Also, in a capital-scarce country like India, misallocation of capital by keeping loss-incurring companies running is not quite the best thing to do. But that is precisely what Big Government ends up doing.

Furthermore, there is Section 25G of the Industrial Disputes Act, which needs to be discussed in slight detail. This section deals with the retrenchment of employees and clearly states that "in the absence of any agreement between the employer and the workman in this behalf, the employer shall ordinarily retrench the workman who was the last person to be employed in that category, unless, for reasons to be recorded, the employer retrenches any other workman".

This basically means that when it comes to retrenchment, the last in-first out principle needs to be followed, i.e., the worker who has joined most recently needs to be fired first and seniority needs to be respected. This sort of labour law is also unique to India.

So the question is: What can be done about this? The state of Rajasthan introduced some labour law reforms in 2015. When it comes to Chapter V B of the Industrial Disputes Act, the threshold for the government permission to lay off or retrench workers or close down an industrial unit has been increased to 300 workers. At the same time, the threshold figures of the Factories Act have been respectively increased to 20 and 40 workers from the current 10 and 20. With Presidential Assent being granted, these changes have now superseded any constraints that may have been imposed by the central government labour laws.[376]

Furthermore, this move of the Rajasthan government has received a lot of good publicity. Analysts have said that other states should look to do the same. An impression has been created that Rajasthan is the first state to increase the cut-off, to 300 workers, for government permission for closure, retrenchment or lay-offs. Nevertheless, this is

incorrect. The erstwhile Andhra Pradesh increased the requirement to 300 workers in 2006, a whole decade ago.[377]

Also, when it comes to the number of factories operating in a state, which is a good representation of how industrialised a state is, Rajasthan is pretty low in the hierarchy.

Unless such changes are brought in by the state governments of industrialised states like Tamil Nadu, Maharashtra and Gujarat, labour law reform in India will just remain a pipe-dream. If any of these states attempts significant labour law reforms, there are bound to be huge protests from the trade unions. It will then become clear if the governments in these states have the necessary resolve required to push through labour reforms. Interestingly, Gujarat and Madhya Pradesh have said that they plan to make changes to a large number of labour laws in order to make their states more investor friendly.[378]

In fact, the government of Gujarat has introduced some labour reforms, but they are more along the lines of *jugaad*, or trying to get around the current set of labour laws, rather than genuine reform.

In 2004, Gujarat passed the Gujarat Industrial Disputes (Amendment) Act and the Gujarat Special Economic Zone Act. These two Acts essentially ensured that Chapter V B of the Industrial Disputes Act was replaced by a more liberal regime. For companies operating inside a Special Economic Zone (SEZ; to be discussed in the next chapter), the government authorisation of retrenchment was replaced by a limited right to compensation for workers who had worked for a year or more.[379]

This, along with improvements in infrastructure (power, water and roads), pushed up the industrial growth rate in the state, which between 2001 and 2004 had stood at 3.95 per cent per year. This jumped to 12.65 per cent per year between 2005 and 2009.[380] While this liberal regime did work, it was available only to those firms operating inside SEZs. It didn't do anything for firms continuing to operate outside the SEZs, which wasn't fair to them.

Given that we are discussing solutions, there needs to be some flexibility in reading Section 25G, the seniority clause which basically mandates that the most recently hired hand needs to be fired first instead of taking into account which worker is more required in order to keep the business going.

Another factor that could possibly be worked on in order to make a retrenchment palatable for workers is the compensation. Currently, the compensation offered is 15 days of pay for each year of employment. In China and South Korea, the compensation offered is 30 days.[381] Something similar can be done in the Indian case as well, so as to effectively double worker compensation in order to ensure that they don't stand in the way of a lay-off or retrenchment or the closure of an unviable firm. Also, it is important to not overdo this. The Rajasthan government has raised the retrenchment compensation to 90 days for every year of service put in by the worker.[382] This obviously makes it very expensive for companies to retrench workers.

****

When it comes to labour laws, the economies of scale really don't kick in, as we saw in the case of the Factories Act earlier in the chapter. As Bhagwati and Panagariya write: "The costs due to labour legislations rise progressively in discrete steps at seven, ten, twenty, fifty and 100 workers. As the firm size rises from six regular workers towards 100, at no point between the two thresholds is the saving in manufacturing costs sufficiently large to pay for the extra costs of satisfying these laws."[383]

In fact, Bhagwati and Panagariya recount an interesting story they were told by the economist Ajay Shah. A few years ago, Shah asked a leading Indian industrialist a very basic question. This industrialist was already making yarn and cloth. So why was he not in the business of garment manufacturing? The industrialist explained that garment manufacturing was a low-margin business and that it would be worth the trouble only if he operated on the scale of one lakh workers. But given India's restrictive labour laws, that would not be practical.[384]

In fact, this is precisely the reason foreign investors have stayed away from setting up mass-manufacturing bases in India. They don't like the idea of not being able to retrench workers, depending on supply and demand. Also, what scares them away is the fact that no guidelines or principles have been laid down on how the government decides on whether to allow a firm to retrench workers or not.[385]

Furthermore, in a globalised world, both foreign as well as Indian companies operating in India need to be competitive as well as fleetfooted in managing their costs. This means being able to hire and re-hire workers according to the demand at any given point of time. In

the case of garment manufacturing, a lot of demand is basically export demand. This means that the demand tends to pick up sometime before Christmas and New Year's, and then falls. In an ideal scenario, this would mean hiring workers just a few months before Christmas and then letting them go after the garments have been made and shipped. But that is not possible, given that permission from the government is needed. This essentially means that garment companies operating in India cannot respond to fluctuations in demand.[386]

As the 11th Five-Year Plan (2007-2012) points out in this context: "However, Chapter V B of the ID Act, 1947, does create a psychological block in entrepreneurs against establishing new enterprises with a large workforce and impede [the] attainment of economies of scale. As a result, firms prefer to set up enterprises with a smaller permanent workforce, and these enterprises are unable to cope with largesize[d] orders from retail market chains, in garments and footwear, for instance."

The Plan also explains why India is behind China when it comes to low-skill manufacturing activities like apparel and textiles:

> The main reason for India to be well behind China in textiles and clothing is the absence of economies of scale in the manufacturing enterprises in the country. While many units in China have tens of thousands of workers, the industrial units in India are discouraged by the requirements of Chapter V B of the Industrial Disputes Act… from employing more than 100 workers. The result is that the industry is fragmented and is unable to respond to the large volumes of orders that are placed by the retail chains in the industrial economies.

In fact, a good comparison here is provided by the Indian information technology industry. After the dotcom and telecom bubbles burst in 2000-2001, many Indian companies postponed the joining of engineers they had recruited. This was done primarily because, with the bursting of the technology bubble, the demand that these companies had anticipated from international companies slackened. In fact, in some cases, the engineers they had recruited joined the company after a waiting period of more than a year.

In May 2016, L&T Infotech withdrew job offers to nearly 1,500 engineers. The ecommerce major Flipkart postponed the date of joining of MBAs it had recruited from the IIMs from June 2016 to December 2016. There are examples of several Indian airlines firing their employees during periods of low demand.

While this is not a direct comparison with Indian manufacturing, the point is that there are times when companies need to adjust their

number of employees depending on the demand for their products or services. This is essential for their survival. Of course, there are cases when companies make a mistake in projecting their demand and then need to course-correct. So, lower-level employees tend to get fired for no fault of theirs.

While Indian companies not operating in the manufacturing space have the flexibility to retrench their employees, those operating in the manufacturing sector don't. This has led to a situation wherein the bulk of Indian firms in the manufacturing sector continue to remain small.

This is a very important point for the *Make in India* programme. If we want foreign firms to make products in the country rather than import them from China and then sell them in India, there will have to be some flexibility adopted regarding Chapter V B of the Industrial Disputes Act. Firms will have to be allowed to hire, fire and re-hire employees depending on their demand scenario. By not allowing firms to do this, the current labour laws essentially work in favour of those who already have permanent jobs and not in favour of the overall labour pool, as the case should be.

Furthermore, if India wants foreign companies to Make in India, it needs to be a part of the global supply chains of multinational companies. And it can't be a part of the global supply chains unless it is a lot more flexible on its hiring and firing policies. (As we saw in the previous chapter, global supply chains are what drive a good proportion of exports in this day and age.)

Also, there is a rather fundamental question that Chapter V B of the Industrial Disputes Act raises. As Anwarul Hoda and Durgesh K Rai ask in a research paper titled 'Labour Regulations and Growth of Manufacturing and Employment in India: Balancing Protection and Flexibility': "When entry into manufacturing activity does not require permission, there is no justification for exit requiring [the] government's consent."[387] Indeed, that is a very valid point.

Other than Chapter V B, another major cause for concern in the Industrial Disputes Act is Section 9A. As per this section, if the job content or the nature of work of an employee or a group of employees needs to be changed, they need to be given a 21-day notice. In practice, the consent of the worker is also required. In an era of machine-driven manufacturing and new technologies, this becomes a

serious impediment to a company looking to introduce a new technology. It may want to redeploy some workers, but it's possible that the workers may not give their consent.[388]

To conclude this section, it is worth quoting the economist TN Srinivasan, who, in a 2003 speech, said:[389]

> The cost of hiring and firing of workers by firms covered by [the] labour laws is high. It is virtually impossible for uncompetitive and loss-making [i.e., loss-incurring] enterprises above a certain size to close down without getting government permission and going through costly delays. The sorry tale of the Board for Industrial and Financial Restructuring, to which such enterprises have been referred, is well known. The Second Labour Commission, in its report, has documented that our labour laws… [are] a major contributory cause of our abject failure to increase by very much the share of our labour force employed in manufacturing.

Until now, we have discussed the Factories Act and the Industrial Disputes Act. Now we shall discuss the Contract Labour (Regulation and Abolition) Act, 1970, and the Trade Unions Act, 1926.

****

The number of people working in the organised manufacturing sector had stood at around six to seven million (60 to 70 lakh) for the period of 10 years up to 1991, when the economic reforms were initiated. The number of people working in organised manufacturing grew at a very slow pace after that. In fact, in 1998-1999, the number actually started to decline. In 2001-2002, the number of people working in organised manufacturing had stood at 5.43 million (54.3 lakh). However, things picked up after 2001-2002, and by 2011-2012, the number of people working in organised manufacturing had more than doubled, to 12.88 million (1.29 crore).[390]

So what brought about this jump? Rather ironically, the Contract Labour (Regulation and Abolition) Act of 1970 and a few developments around it.

In the 1960s, companies started to use contract labour in order to bring down their labour costs by paying lower salaries. Also, contract workers were denied social security benefits. In order to clamp down on this trend, the government introduced the Contract Labour Act in 1970.[391] As is the case with other labour laws, the law was adopted by state governments as well. The idea was to get companies to recruit more permanent workers.

The Act applies to every firm or contractor who employs 20 or

more workers on any given day in the past one year. The Act basically divides work between core activities and non-core activities of a firm, and says that the contract workers should be employed only for the non-core activities of the firm. Furthermore, the contract workers employed in the non-core activities need to be paid the same compensation as the permanent employees of the firm who are carrying out similar work.

The contractors need to get a licence in order to operate, and the firms need to be registered as principal employers with the appropriate authorities. The Act also makes the firm employing the contract workers liable for prosecution if the contractor through which the contract workers have been employed defaults on wages, health insurance, provident fund, bonuses, etc.[392] In case the contractor fails to pay the wages in part or in full, the principal employer is liable to pay the same.[393]

This is something that needs to change. Given that the contractor needs to get a licence in order to become a labour contractor, he should be treated as the principal employer. This is likely to make the contractors more responsible in the way they treat their contract workers.

Even though contract workers are an important part of Indian factories, the thinking that contract workers should not be allowed to work in factories has historically been a part of the Indian attitude. The Bombay Textiles Labour Enquiry Committee (1938) was of the view that “if the management of the mills” did not take on the “responsibility for such labour”, there was a good chance “of its being sweated and exploited by the contractor”. It didn’t stop at this and, in fact, recommended the abolition of the contract system of engaging labour as soon as possible and that “workers for every department in a mill should be recruited and paid directly by the management”.[394]

The Bihar Labour Enquiry Committee of 1941 went along the lines of the Bombay Textiles Labour Enquiry Committee. It condemned the recruitment of workers through contractors because it felt that “the contractors ordinarily lack a sense of moral obligation towards labour, which the employers or the managers are expected to have, and, therefore, do not often hesitate to exploit the helpless position of the labour in their charge”.[395]

With this kind of background in place, it wasn’t surprising that the

Contract Act of 1970 also talked about abolishing contract labour. And this is precisely where things get interesting.

Under Section 10(1) of the Act, the government can prohibit the use of contract workers in any process, operation or other work in any establishment. This can be done by taking several factors into account: a) whether contract workers are being used for perennial work, i.e., work which is carried out daily; b) whether regular workers are doing the same job that contract workers do; c) whether the work is incidental or necessary for the work of the factory.

Over the decades, various central governments as well as state governments have issued notifications which barred the use of contract workers in a factory. This has often led to litigation, primarily because the issue of what happens to the contract workers once the contract work in an establishment has been abolished by the government came to the fore.

The Supreme Court has pronounced several judgements on this issue. In 1974, the Court ruled that the government has the power to prohibit the use of contract labour in an establishment (Gammon India versus the Union of India). In 1997, the court ruled that, in the case of the abolition of contract work in a firm, the erstwhile principal employer needs to absorb the contract workers into permanent jobs (the Air India Statutory Corporation versus the United Labour Union).[396]

In 2001, the Supreme Court overturned its 1997 judgement. It said that the erstwhile employer wasn't obliged to offer permanent jobs to contract workers in case of the abolition of contract work at a firm (Steel Authority of India versus National Union Water Front Workers). The reasoning offered by the Court was that "the contract labour[er] is not rendered unemployed, as is generally assumed, but continues in the employment of the contractor, as the notification does not sever the relationship of master and servant between contractor and contract labour[er]".[397]

This judgement, along with other reasons (which we shall dwell upon), went a long way in helping firms recruit contract workers for a lot of jobs. The government did not take any action against this, primarily because, even if it were to abolish contract work in a firm, the firm was no longer obliged to offer permanent jobs to the contract workers.[398]

Along with these judgements, there were other Supreme Court judgements which helped firms in recruiting contract employees. It is important to discuss the observations made by the Supreme Court in two cases where they basically talked about the issue of wage parity between the contract worker and the permanent employee doing the same work.

In the 2002 case of the Uttar Pradesh Rajya Vidyut Utpadan Board versus the Uttar Pradesh Vidyut Mazdoor Sangh, the court said:

> [The] nature of work, duties and responsibilities attached thereto are relevant in comparing and evaluating as to whether the workmen employed through [the] contractor perform the same or similar kind of work as the workmen directly employed by the principal employer. [The] degree of skill and various dimensions of a given job have to be gone into to reach a conclusion… [as to whether] the nature[s] of duties of the staff in [the] two categories are on par or otherwise. Often, the difference may be of degree. *It is well settled that* [the] *nature of work cannot be judged by* [the] *mere volume of work; there may be qualitative difference as regards reliability and responsibility* [emphasis added].

What the Court basically said here was that just because two people, a permanent worker and a contract worker, were doing a similar kind of work, it does not mean that they should be paid the same wages. The skill, reliability and responsibility of the workers should also be taken into account when deciding whether similar work being done by a permanent worker and a contract worker can be considered to be at par so that they can be paid the same wages.[399]

In another case (Hindustan Steelworks Construction Ltd. versus the Commissioner of Labour and Others, 1996), the Court said that the principal employer (i.e., the firm where the contract workers were working) wasn't liable to make up for the difference in the wages between those of a contract worker and a permanent worker performing the same kind of work.[400]

This was a sort of a get-out-of-jail judgement for firms employing contract workers. As Hoda and Rai write: "It is extremely difficult to implement the notion of wage parity [by] taking into account the dimension of the level of skills. As a result, wage parity between the two categories of workers is not legally enforceable."[401] The question of whether the skills of two different individuals are the same or not is not at all easy to answer.

In 2003, the erstwhile state of Andhra Pradesh listed out the activities in which contract workers were allowed. The number of core

activities was reduced, allowing the use of contract labour in many areas. Furthermore, it allowed the use of contract workers even in core activities if there was a sudden increase in activity which needed completion in a specified time. This basically meant that contract labour could be used for most activities in manufacturing in Andhra Pradesh. Not surprisingly, in 2009-2010, the proportion of contract workers, when it came to employment in manufacturing, stood at 55 per cent in Andhra Pradesh, as against the countrywide figure of 33 per cent.[402]

What needs to be mentioned here is that, unlike in Andhra Pradesh, the laws in most states do not make the distinction between core activities and non-core activities very clear. Furthermore, firms argue that the distinction between core and non-core activities changes as technologies and corporate strategies change.[403]

Also, firms have worked their way around this Act in various ways. As Ajeet N Mathur writes in a research paper titled 'Is "Make in India" Constrained by India's Labour Market Regulations?', companies "have used multiple contractors, and often multiple names and identities for the same person". This is done so as to ensure that contract workers do not demand permanent employment.[404]

Contractors rotate workers among firms, so that none of the contract workers can end up working at a firm for 240 days at a stretch and thus claim permanent employment. The firms also rotate the contractors, in order to get around the Contract Labour Act.[405] This basically means that contract workers do not have the same kind of social security that permanent workers do. Furthermore, they do not get paid the same amount of money that a regular worker doing the same work does.

Also, while private companies use various ways to get around the various labour laws, the public sector companies, owned majorly or totally by the government, cannot do the same. As the economist TN Srinivasan said in a 2003 speech:[406]

> Ironically, although the labour laws are evaded or avoided by private enterprises, albeit at… [the] cost of their competitiveness, the public sector enterprises do not have that option. This has an impact on privatisation—in particular, given that our public enterprises are over-manned, any potential private bidder for such an enterprise would not actually bid if he anticipates that retrenching the excess workers would be impossible if he acquires the enterprise, or, if he did bid, would bid a low enough price for it to account for the costly buy-out of excess workers. In any case, the fact that the public enterprise cannot easily retrench means that its workers would continue to enjoy

their privileges, whether or not the enterprise earns a social rate of return on [the] capital invested in it.

Furthermore, state governments also turn a blind eye to the private companies getting around the labour laws in order to not drive away prospective as well as current private investors.

All this has essentially led to two things: a) The number of contract workers in Indian manufacturing has gone up. The number of contract labourers in organised manufacturing has gone up from 1.21 million (12.1 lakh) in 2000-2001 to 3.4 million (34 lakh) in 2011-2012. As far as the proportion is concerned, it has gone up from 20.3 per cent in 2000-2001 to 34.63 per cent in 2011-2012. So, a legal lacuna has helped Indian manufacturing employ more contract workers. b) Using the 'skills' lacuna, the wages paid to contract workers are lower than those of permanent workers, even though they may be doing the same job. In 2008-2009, the wages of contract workers had stood at 68.8 per cent of those of the permanent workers. It jumped to 74 per cent in 2009-2010, before falling to 70.8 per cent by 2011-2012.[407]

If we look at the data on the number of workers working per factory, we see similar trends. In 2000-2001, the number of permanent workers per factory was more or less around 50. And this is where it stayed till 2009-2010. In 2011-2012, it declined to 45 workers per factory. In 2000-2001, the number of contract workers per factory was just under 10. This increased to 19 in 2009-2010 and then fell to 17 in 2011-2012.[408]

In fact, there are other interesting trends that need to be pointed out here as well. When it comes to small factories, which have less than 100 workers, the share of the contract workers among the total number of workers increases rapidly as the size of the factory increases. When it comes to medium-to-big factories (factories with 100 to less than 2,000 workers), the share of the contract workers remains more or less constant. The share increases rapidly for large factories (with over 2,000 workers) as the size of the factory increases. When the number of workers working in a factory goes over 5,000 workers, then the share of the contract workers increases to over 35 per cent.[409]

A possible explanation for this phenomenon may lie in the fact that factories employing more than 5,000 workers tend to be more capital-intensive industries, which use machines for manufacturing. In this scenario, workers are primarily needed for repetitive machine-based

work or to carry out repairs and maintenance. This can easily be achieved through contract workers.[410]

The states that have contributed the most to the increase in the total number of contract workers are Maharashtra, Tamil Nadu, Gujarat, Andhra Pradesh and Uttar Pradesh.[411] If we leave out Uttar Pradesh, the other four states can safely be said to be among the most industrialised states in India.

The entire idea behind the Contract Labour Act, as mentioned earlier, was to get companies to recruit permanent workers, but what has happened is exactly the opposite. Interestingly, as TS Papola points out in 'The Role of Labour Regulation and Reforms in India', of the workers recruited between 2000 and 2010, nearly "two-thirds are employed through contractors, and are not on the payroll of enterprises either as permanent, temporary or casual workers". This is the exact opposite of what the government set out to achieve, and so is another glaring example of the unintended consequences of Big Government.

One way to look at this is to realise that "in order to protect the existing employees, potential employees remain unemployed or enter the unorganised sector with no social security".[412] What makes the situation worse is that there are no precise estimates of the total number of contract labourers in the country.[413]

Hence, this particular labour law, like other labour laws, ends up benefiting those workers who already have permanent jobs. And this has led to significant labour trouble in big factories across the country. Here are a few examples. In September 2008, the CEO of Graziano Transmissioni India, an auto-component maker, was clubbed to death by a group of 200 workers. In 2010, an assistant general manager working for the auto-component maker Allied Nippon was stoned to death by angry workers. In 2011, a deputy general manager of Powmex Steel was killed when his vehicle was set on fire by workers. And then there was the 2012 case of workers rioting at the Manesar Plant of Maruti Suzuki, India's largest car maker, leaving an HR manager dead and 100 officials in hospital with serious injuries.[414]

The trouble at the Maruti plant was over the formation of a trade union and the regularisation of the contract workers who worked at the plant. As can be seen from Table 7.1, the number of contract

workers at Maruti is only a little lower than their regular manpower.

Table 7.1: Types of Employees at Maruti Suzuki during 2012-2013.

Manpower Category	Workforce
Regular Manpower	
Assistant Supervisors & above	4,648
Associates/Technicians	3,029
Trainees	1,744
Total Regular Manpower	**9,421**
Apprentices	936
Contractual Manpower / Temporary Workers	8,554
Total Manpower	**18,911**

Source: Annual Report of Maruti Suzuki, 2012-2013.

In this scenario, it is but natural that many contract workers would have been doing the same work as regular employees, but getting paid less. Other than getting paid less, contract workers suffer from the lack of job security and social security, and exploitation by both companies and contractors. And this, naturally, leads to trouble.

Data from the International Labour Office suggests that, for the period 2005 to 2008, India was amongst the top five countries in the world when it came to the number of workdays lost per 1,000 employees.[415]

So, the Contract Labour Act in its current form benefits neither the contract worker nor the company employing him. John Harriss writes in a research paper titled 'Labour Problem: Recent Developments in India' that the labour legislation of India "can be held to be dysfunctional both from the perspective of business… and from the point of view of labour".[416]

One sector that has suffered a lot due to labour unrest is the automobile sector, particularly in the state of Haryana. Factories of companies like Maruti Suzuki, Hero Motors, Honda Motorcycles and Scooters India, Hyundai, MRF, Sona Koyo Steering Systems and Toyota Kirloskar Motors have had to face labour unrest.[417]

This sector has tremendous potential when it comes to the *Make in India* programme, given that many international automobile companies are already operating in India. And some of them, like

Hyundai and Maruti Suzuki, do produce cars for the export market. In fact, one estimate suggests that, if the automobile and two-wheeler sectors are to double their revenues in the years to come, they need a flexible workforce and an atmosphere in which companies can hire and fire workers depending on the demand for their cars, trucks, scooters and motorbikes.[418]

The question is: How can this be achieved? How can companies hire contract employees without being unfair to them or having to resort to shenanigans like they currently do? How can we ensure a situation wherein contract workers, for the period they are working in a company, are paid as much as regular employees doing the same work? Indeed, is there a way out of the mess that currently prevails?

One of the main points that governments (both the central as well as state governments) need to realise is that flexibility is the key to a competitive labour market. This flexibility can be brought about in the labour market by offering fixed-term contracts.

The Industrial Employment (Standing Orders) Act of 1946 categorises workers as permanent, temporary, apprentices, probationers or *badlis* (substitutes). The Act makes it clear that a temporary workman is one who has been taken on to carry out work which is temporary in nature and is likely to be finished within a limited period.[419]

In December 2003, the category of 'fixed-term employment' was introduced into the classification of workers. A new paragraph (h) was added to the Industrial Employment (Standing Orders) Act of 1946, and this is how it read:

> A 'fixed-term employment' workman [is one] who has been engaged on the basis of contract of employment for a fixed period. However, his working hours, wages, allowances and other benefits shall not be less than that of a permanent workman. He shall also be eligible for all statutory benefits available to a permanent workman proportionately according to the period of service rendered by him, even though his period of employment does not extend to the qualifying period of employment required in the statute.

This basically allowed the employment of contract workers for a fixed term. The provision also required that the contract workers be paid the same wages and other benefits as the regular ones. Furthermore, the provision did not implement any restriction on the duration of the employment. It also did not say anything about the contract being renewed. Nevertheless, in October 2007, this amendment was deleted. Right now, the legal position of fixed-term

employment is unclear.[420]

In fact, it is interesting to see how fixed-term contracts operate the world over. The United States does not impose any restriction on fixedterm contracts. South Korea allows fixed-term contracts for a maximum of two years. In Japan, fixed-term contracts of up to three years can be offered. They can be of up to five years for highly skilled employees and people over sixty years of age. Furthermore, there are no limits to the number of renewals, although after repeated renewals, if an employer refuses a renewal, he must have a valid reason for it.

France allows contract workers only for temporary jobs. Renewal is possible only once, and the maximum duration allowed is 18 months. Germany is more flexible than France is. The country allows fixed-term contracts, with four renewals and a maximum duration of two years.[421]

Canada also allows workers to be recruited on fixed-term contracts. The law allows the employers to mention the expected duration of employment in the contract and gives them the flexibility to hire directly or through an agency. The contract labourers have access to social security. They are recruited primarily in the areas of construction, healthcare, education and public administration.[422]

Fixed-term contracts are allowed in Russia as well. The labour laws of the country allow companies to hire workers on contract and do not make a distinction between core and non-core work, as Indian law does. These jobs come with social security and are for a maximum duration of five years.[423]

The point being that fixed-term contracts are very common all over the world, especially in countries which have done economically much better than India has.

Hence, the fixed-term employment clause needs to be re-introduced to allow companies to hire and fire workers depending on the demand for their products. Also, the Act dealing with contract labour is currently termed as the Contract Labour (Regulation and Abolition) Act of 1970. The term ‘abolition’ needs to be dropped from it because we live in a day and age when the abolition of contract workers is simply not possible.

This has become very clear with the way things have evolved in India. Despite the prevailing labour laws, which go against them, the

number of contract workers has only increased over the years. Also, abolishing or prohibiting contract workers would only go against the aims of the *Make in India* programme. If the government wants foreign as well as Indian companies to make in India, and not just import and sell goods in India, it needs to let companies work with a flexible labour recruitment system.

And what are the chances of something like that happening? The fact that governments have an inherent need to control and that the politicians running governments have to be re-elected every few years make me a tad sceptical about whether any government will go about legalising contract labour so that companies employing contract workers can operate in a transparent sort of way, which is not the way things currently are. Nevertheless, unless changes are brought in on this front, the chances of the *Make in India* programme taking off in a big way remain rather dim.

In June 2015, a newsreport in the *Business Standard* suggested that the Labour Ministry was looking to amend the Industrial Employment (Standing Orders) Act and allow companies to hire workers on fixed-term contracts and "terminate their services once the project was completed without having to give any notice".[424]

Nevertheless, the current Labour Minister, Bandaru Dattatreya, told the same newspaper in September 2015: "We might not regularise contract workers."[425]

In the same interview, Dattatreya talked about the poor attitude of the trade unions and how it should change and be in the interests of the workers. The minister also talked about the fact that the labour laws of India were made a long time ago and were not in line with the way business is conducted in this day and age. He also asked: "If you don't want any change today, what does it indicate?"[426]

After this, there has been no mention of fixed-term employment. The irony is that the government employs more contract workers as a proportion of its total workers in comparison to the private sector. Nearly 32 per cent of the workforce in the public sector is on contract. The figure for the private sector stands at 30 per cent.[427]

Despite this negative attitude towards reforming the labour laws, the Modi government did end up pushing through some labour reforms in the textiles sector. On June 22, 2016, the Modi government

made a small but very important change in the labour laws that govern the textiles sector in India.

As the press release put out by the Ministry of Textiles pointed out: "Looking to the seasonal nature of the industry, fixed-term employment shall be introduced for the garments sector. A fixed-term workman will be considered at par with a permanent workman in terms of working hours, wages, allowances and other statutory dues."

This is a step in the right direction and will help textile manufacturers to hire and fire workers depending on their demand. It will also ensure that contract workers are not taken for a ride and that they get paid the same amount of money as a permanent worker doing the same job.

The textiles sector has the ability to create many low-skilled jobs, and that gives it tremendous ability to align itself with India's natural competitive advantage, i.e., low-skilled labour. In fact, every unit of investment in this sector generates 12 times as many jobs as in the automobile sector and 30 times as many jobs as in the steel sector.[428]

Furthermore, Indian textile firms are too small and, given this, they lack the economies of scale needed to compete globally. An estimated 78 per cent of the textile firms employ less than 50 workers. Only 10 per cent of the firms employ more than 500 workers. For China, these numbers stand at 15 per cent and 28 per cent, respectively.[429]

One of the reasons that the Indian companies cannot compete globally is because they can't hire and fire workers according to the demand for their products.

The government has now introduced the concept of the fixed-term contract, which allows garment manufacturing companies to hire workers for a fixed period instead of offering permanent employment. Until now, companies had been hiring contract workers, who in many cases are not paid as much as permanent workers even though the work being done is exactly the same. The fixed-term contracts will also allow companies the flexibility to hire according to their demand. Furthermore, they won't have to keep workers on their rolls when they don't actually need them.

In fact, this is one factor which has led to many textile companies not taking on more business in the past, because once they hired

workers, they weren't able to let them go.

****

One reason why labour reforms have never happened in India is because of the reluctance of successive governments to take on the trade unions. An excellent example of this is when the Atal Bihari Vajpayee government tried, in 2002, to change the Industrial Disputes Act. It tried to increase the limit, from 100 to 1,000 workers, beyond which a firm looking to retrench or lay off workers had to approach the government for permission. At the same time, it proposed to increase the severance package, from the prevailing 15 days to 45 days of salary for each year worked.[430] The trade unions opposed this, and it never made its way through.

The Trade Unions Act of 1926 originally allowed seven workers in a firm to form a trade union. This led to a large number of trade unions in firms. This was modified only in 2001. After the amendment, in order to form a new union, 10 per cent of the workforce or 100 workers, whichever is lower, is required.

But even this amendment did not help, and the number of trade unions attached to large firms continued to be high. The Neyveli Lignite Corporation has as many as 50 trade unions and associations.[431] This creates massive problems.

The employers can play one union against the other.[432] At the same time, there is no obligation on the part of the employer to recognise a registered trade union. In fact, this hurts the entire process of collective bargaining. Settlements can be made by employers with unrecognised unions. Nevertheless, these settlements are binding only on the participating unions. Hence, other unions can raise a dispute over the same issue.[433]

Furthermore, every political party worth its salt has a trade union of its own. Party affiliations also hamper the unity of unions and, at the same time, hamper the process of collective bargaining. What helps political parties is the fact that, currently, outsiders are allowed to be office bearers of unions.

In fact, before an amendment was made in 2001, Section 22 of the Trade Unions Act allowed half of the office bearers of a union to be outsiders. After the amendment was made, one-third or five office bearers in a trade union, whichever is less, can be outsiders. Outsiders

are essentially individuals who do not work in the same industry as the firm. Even with the amendment, outsiders can corner the most important posts in a trade union. Having done that, their stand on any issue is, more often than not, likely to be coloured by their political affiliation. This can actually marginalise the workers and the real issues that impact them.[434]

Also, what does not help is the fact that the trade union law, in most cases, does not call for a secret ballot, either to elect office bearers or for the approval of industrial actions, such as strikes. The only state which works differently on this front is Maharashtra. The Maharashtra Recognition of Trade Unions and Unfair Labour Practices Act of 1970 essentially calls on trade unions to prove their majority through a secret ballot process supervised by the Labour Department. The trade union which wins earns the right to be the collective bargaining agent for the workmen. This does not allow firms to follow the divide-and-rule policy, which they can in the case of multiple trade unions. On the flip side, it also makes unions militant.[435]

Nevertheless, the secret ballot process works much better than no secret ballot at all. It brings down the transaction costs of having to deal with multiple trade unions. Interestingly, in the recent past, the state of Rajasthan has tried to tackle the problem of many trade unions operating within the same firm by raising the norm on the minimum number of workers required to form a union to at least 30 per cent. In the days to come, other states may also have to work towards this in order to promote manufacturing.[436]

In fact, there is a thing or two that we can pick up from how trade unions operate in countries which are more economically successful than India is. Take the case of South Korea. From 2011 onwards, the labour laws of South Korea have allowed multiple unions to exist. Nevertheless, when more than one union exists, the unions must cooperate to present a unified bargaining position so that a single agreement can be reached with the management. Furthermore, industrial action cannot be resorted to without a secret ballot being held.[437]

In Malaysia, trade unions cannot go on strike without obtaining the consent of at least two-thirds of its members through a secret ballot. Also, anyone who wants to become an office bearer should have been a worker for at least one year in the firm or industry with which the trade union is connected.[438]

In India, we have professional trade union leaders who have never worked in either the industry or the sector whose workers they choose to represent. The law, the way it is currently structured, essentially helps political parties to infiltrate trade unions. Parties use trade unions to infiltrate a particular industry or a particular sector and, in the process, manage to create a vote bank. In other cases, they are primarily catering to a vote bank. Hence, it is in the interests of political parties that the situation continue to remain as it is.

Despite several minor tweaks being made to the labour laws over the years, the basic problem of too many labour laws still remains. For more than a year now, the Modi government has been talking about merging the 44 central government labour laws into four codes, respectively dealing with wages, industrial relations, social security, and the safety and welfare of workers.[439]

For example, the labour code on wages would bring together features of the Minimum Wages Act of 1948, the Payment of Wages Act of 1936, the Payment of Bonus Act of 1965, and the Equal Remuneration Act of 1976.[440]

There will be tremendous pressure from the trade unions on the government to not push this through. Furthermore, other political parties will also oppose it. In this scenario, it remains to be seen whether the Modi government will actually be able to push through labour law reforms. Having said that, the Big Government that prevails over India's labour laws needs to go if the country has to reach anywhere with its *Make in India* programme.

In late May 2016, Prime Minister Modi gave an interview to *The Wall Street Journal* in which he said that labour reform should not just imply the interests of business. It should also take into account the interests of the labourer. As we have seen through this chapter, the labour laws, the way they are currently structured, are essentially in the interests of workers who already have regular/permanent jobs at manufacturing firms. The laws go against labour in general. And this must change.

These laws protect only around 7-8 per cent of the workers, those who have regular jobs in the organised sector. This happens at the cost of the remaining workers, who work in the unorganised sector or who work as contract workers in the organised sector. In fact, the

other major problem with these laws is that they more or less treat the small and medium enterprises at par with large firms. This needs to change. There needs to be a separate and simpler set of labour laws for the small and medium enterprises, with less than 50 employees.[441]

In fact, there should be just one labour law governing small and medium enterprises. This, for one, would incentivise the many small and medium enterprises that currently operate in India to grow a little bigger than they currently are. And this should help in creating many jobs.

In his interview with *The Wall Street Journal*, Modi also said something which he shouldn't have. He said that some states in India do not have industry and that they are primarily agricultural. Hence, these states do not need labour reforms. Only states which have a "substantial manufacturing sector" need labour reforms, according to Modi.

This approach is clearly not the right one. One of the biggest problems in India is that the country has way too many people operating in agriculture. This number needs to come down, and this can only happen if people are moved out of agriculture into other areas. For this to happen, almost every state needs some level of industrial activity, and that is not going to happen unless the labour laws are simplified both at the central as well as the state levels. The sooner the Modi government understands this, the better it will be for the country.

Despite what Modi had said in the 2016 interview, some realisation had already set in on this front. In October 2014, he had announced the creation of a new online portal. This portal would allow nearly 6 lakh firms to self-certify their compliance with sixteen different labour laws. Under the system as it had existed, each law allowed labour inspectors to harass firms and seeks bribes. Under the new system, the inspector raj will not completely disappear. Random audits will be carried out in order to check if the firms are actually complying with the laws.[442] While this does not do away with the many labour laws which are holding back the expansion of these firms, it is, nonetheless, a small step in the right direction.

[xiv] The 2009 and 2010 Indian Labour Year Books were the latest that I could find.

8.A FOUR-LETTER WORD CALLED LAND

LAND
LAND
LAND

> Land acquisition is no longer a holy cow but a fallen ox.
> Everyone is a butcher when the axe falls.
>
> – Justice SH Khan, Allahabad High Court[443]

Until I moved to Pune to do my MBA, I had stayed at the CMPDI Colony in Ranchi. CMPDI, or the Central Mine Planning and Design Institute, is one of the subsidiaries of Coal India Ltd.

Like CMPDI, Ranchi had several other CPSEs. These included the Central Coalfields Ltd. (another subsidiary of Coal India), the Steel Authority of India Ltd., and MECON Ltd. (formerly Metallurgical and Engineering Consultants (India) Ltd.).

But the biggest of them all was the Heavy Engineering Corporation (HEC). When I say biggest, I mean in terms of the land occupied, and not the total sales or net profit. Based on the outskirts of Ranchi, HEC was a town in itself. It had a huge area of land. Many years later, now that I think of it, the actual operations of HEC (i.e., its offices and its production facilities) occupied only a very small portion of the total land that the company had.

This is true about many central public sector enterprises operating all across the country. They have huge areas of land and a lot of it has not been put to any use. In fact, take the case of Japan. The country has around 351 people per square kilometre of land. In comparison, India has around 420 people per square kilometre of land.

Japan uses around 1.9 million hectares of land for residential as well as industrial use. This is only around 5 per cent of the land that the country has. The industrial output of Japan is three times that of India. Furthermore, India has 22 million hectares of non-agricultural land. What does this mean? That Japan uses less than 10 per cent of the non-agricultural land that India has to produce an industrial output which is two times greater.[444]

The major reason for this has been the easy availability of land for both the private companies as well as the public sector companies in India. This easy availability of land ensures that, whenever land is being acquired, excess land is acquired. As Sebastian Morris and Ajay

Pandey write in a research paper titled 'Towards Reform of the Land Acquisition Framework in India': "Projects based on compulsory acquisition typically acquire excess land that remains unutilised for years – public sector units, educational institutions, universities, other institutions have all exhibited this phenomenon…. Equally importantly, when the land cost is not endogenous to the budget of the project as a whole, there is a tendency to ask for excess land, especially on the part of PSUs and autonomous institutions."[445]

As we go through this chapter, the meaning of the above paragraph shall become obvious. The question is: How did we reach this stage? Until 2013, land acquisition in India was governed by the Land Acquisition Act of 1894. This Act gave almost unparalleled powers to the government to acquire almost any land and almost as much land as it wanted to and at any point of time.

Now why did an Act passed by the British more than fifty years before India's Independence manage to last, with a few tweaks, for close to 66 years after Independence? Before I get into answering this question, it is important to go back into history and understand why the British came up with a land acquisition law in the first place.

The first land acquisition law was Regulation I of the Bengal Act of 1824. The law enabled the government to acquire land for public purpose at a fair and reasonable price. By Act I of 1850, the first seven sections of Regulation I were extended to all land within the town of Calcutta (now Kolkata). This included a rule which essentially said that a declaration by the Governor of Bengal that the land being acquired by the government was needed for a public purpose was enough to establish public purpose. This was followed by Act XX of 1852 and Amending Act I of 1854. Both the Acts maintained that the government had absolute authority to determine public purpose.[446]

In 1857, after the First War of Independence, the British Crown took over the administration of India from the East India Company. Act VI of 1857 repealed all the existing land acquisition laws and laid out a new policy for land acquisition in British India. Act XXII of 1863, for the first time, made a provision for the government to acquire land on behalf of private companies or individuals. Act X of 1870 came up with detailed rules for the assessment of compensation.[447]

In between, there were many other Acts dealing with land

acquisition.[448] All these Acts finally led to the Land Acquisition Act of 1894. This Act provided a definitive framework for the conditions under which land could be acquired by the government, along with a methodology for compensating the landowners for the acquisition.

****

Before going any further, it is important to understand the concept of 'eminent domain'. The origins of this term can be traced to the Dutch jurist Hugo Grotius, who, in 1625, wrote a legal treatise and described eminent domain using the term *dominium eminens* (Latin for 'supreme lordship') as follows: "The property of subjects is under the eminent domain of the state, so that the state or he who acts for it may use and even alienate and destroy such property, not only in the case of extreme necessity, in which even private persons have a right over the property of others, but for ends of public utility, to which ends those who founded civil society must be supposed to have intended that private ends should give way. But it is to be added that, when this is done, the state is bound to make good the loss to those who lose their property."[449]

And what does all this mean in plain English? As Jairam Ramesh and Muhammed Ali Khan write in *Legislating for Justice—The Making of the 2013 Land Acquisition Law*: "Acquisition of property is founded upon the universally recognised principle of 'Eminent Domain'…. At its most basic, Eminent Domain refers to the inherent authority of the Government to acquire private property on the payment of fair compensation for a use that benefits [the] public at large…. The concept enjoys recognition under international law with the caveat that entities… whose land or property is being acquired must be justly compensated."[450]

In some countries, like Australia and Hong Kong, eminent domain is referred to as 'resumption'. The term rests on the assumption that all land essentially belongs to the government in perpetuity and, whenever it takes over land for public purpose, it is only resuming its ownership. Ramesh and Khan call eminent domain *a necessary evil*, given that the government needs land for roads, airports, railway stations, hospitals, public schools, playgrounds for children, etc.[451]

The Land Acquisition Act of 1894 gave the power of eminent domain to the government. Before India's Independence in 1947, the colonial rulers used the Act to acquire land to build roads and canals.

It was also used to serve other strategic colonial interests such as the building of cantonment areas, garrisons, telegraph offices and the railways.[452]

The question remains as to why this Act continued even after Independence? Article 372 of the Constitution of Independent India, which came into force from January 26, 1950, allowed British-era laws to be incorporated into the Indian union unless they were explicitly repealed.[453] The land acquisition law wasn't repealed.

This was primarily because the government decided to launch a massive industrialisation plan itself. As Arvind Panagariya writes in *India—The Emerging Giant*: "Nehru wanted India to be independent of foreign markets in a relatively short period of time. This meant… the development of the machinery sector, so that future investments would not have to depend on external sources of supply."[454]

This saw the start of many public sector enterprises. As mentioned earlier, in 1951, the government of India owned only five public sector enterprises, but the number exploded in the years to come. There was a basic difference between the land that was acquired by the British government before Independence and the land that was acquired by the Indian government after Independence.

The British acquired land for infrastructure and governance, as well as to serve their own strategic interests. On the other hand, the Indian government, other than acquiring land for creating physical infrastructure and governance, also compulsorily acquired land for commercial activities, like manufacturing and trade. This increased the scope of the compulsory acquisitions of land carried out by the state.[455]

Other than launching many public sector enterprises, the 1950s and the 1960s were also the years when the big dams as well as the big steel plants were built. All these 'temples of modern India' basically needed land. And for this, the government needed a readymade legislation which would help it acquire land quickly and without too much of a headache. This is why the Land Acquisition Act of 1894 continued to hold after Independence.

The Act had a very wide-ranging definition of the public purpose under which the government could acquire land by using its eminent domain. This included land for: a) village sites or "the extension, planned development or improvement of existing village sites"; b)

town or rural planning; c) planned development from public funds in pursuance of any scheme or policy of the government; d) any company owned or controlled by the government; e) homes to be built for the poor or the landless, or people residing in areas affected by natural calamities, or people displaced by the implementation of any scheme undertaken by the government; and f) education, housing, health or slum clearance schemes sponsored by the government.[456]

This wide-ranging definition of 'public purpose' allowed the government to acquire land for the infrastructure that it was trying to build. It also allowed CPSEs operating throughout the country to acquire land that was needed to get these enterprises going. It also allowed the government to build new cities, like Chandigarh, as well as expand cities like Delhi (actually, New Delhi), where the central government is based.

In fact, many dams and steel plants were started and built between the late 1940s and the early 1960s. The Bhakra Nangal dam in Punjab and Himachal Pradesh, the Damodar Valley Project in West Bengal and Jharkhand (then Bihar), and the Hirakud dam in Odisha (then Orissa) were all started in 1948. They were completed between 1953 and 1963. The steel plants in Bhilai in Chhattisgarh (then Madhya Pradesh), Rourkela in Odisha, and Durgapur in West Bengal had also been commissioned by 1961. Each of these projects needed more than one lakh acres of land. The only way for the government to acquire this land quickly was to use the public purpose provision of the Land Acquisition Act of 1894.[457]

As per the 1894 Act, the landholder whose land was taken over was to be paid the market value of the land at the date of the publication of the notification announcing that the government intended to take over the land. Over and above this, the government had to pay a solatium of 30 per cent on the market price because of the compulsory nature of the acquisition. This was only after 1984. Until 1984, when several amendments were made to the Act, the solatium was limited to 15 per cent of the market price.[458] A solatium is essentially a compensation given by the government for an emotional harm, rather than a physical or financial one. The government also had to compensate for any trees or crops on the land as well as movable and immovable property.[459]

At least, this is how it was supposed to work in theory. But, as is

the case with most things Indian, it did not. Take the case of the Hirakud Dam. As Sanjoy Chakravorty writes in *The Price of Land—Acquisition, Conflict, Consequence*:[460]

> In the case of [the] Hirakud Dam, the payment was Rs. 50-200 per acre (about Rs. 1,500-6,000 per acre in current prices)…. There are estimates that Rs. 12 crore were budgeted for compensation, reduced later to Rs. 9.5 crore, but the eventual pay-out totalled Rs. 3.32 crore…. Some 6,000 families are yet to receive compensation. Their claims, and the claims of the landless people who were also evicted but never considered for compensation, remain a live issue in Odisha politics.

In fact, dams and other large public projects, the so-called temples of modern India, have inflicted some of the worst suffering in Independent India.[461] As Ramesh and Khan point out: "While there is no comprehensive record of how many individuals have actually been displaced by land acquisition post-Independence, estimates put forth by credible studies find that close to 60 million [6 crore] individuals have been displaced since Independence. Worse still, only about a third of these have actually seen some measure of resettlement and rehabilitation."[462] These people, if they are alive today, must be very old.

The 1894 Land Acquisition Act did not have any provision for rehabilitation and resettlement. What also needs to be mentioned here is that, when any government in India takes away land for a public purpose, it does not just impact the landowner. It impacts others as well. As mentioned earlier, Indian agriculture has huge disguised unemployment. This basically means that there are many more people involved in agriculture than are needed.

Hence, when agricultural land is taken away by the government, it impacts those who work on the land as well. Furthermore, when entire villages, or a substantial part of a village, are taken over, it impacts the livelihood of the "people in the interstices of the economy based on land". This includes domestic servants, menial labourers, potters, rickshaw pullers, etc.[463] Estimates suggest that 25 to 40 per cent of the rural population is landless, but *land dependent*. This basically means that a significant portion of the population has been adversely affected by the land acquisition for public purpose carried out by the government. As far as the proportion of land is concerned, Chakravorty estimates that 10 per cent of the nation's usable land (and not just agricultural land) has been adversely affected.

What made the situation worse was the fact that the 1894 Land Acquisition Act had an urgency clause built into it. As Section 17 of

the Act pointed out: “In cases of urgency, whenever the [appropriate Government] so directs, the Collector, though no such award has been made, may, on the expiration of fifteen days from the publication of the notice mentioned in section 9, subsection (1), [take possession of any land needed for a public purpose].”

The urgency clause essentially allowed the government, operating through the Collector, to take possession of the desired land within a period of fifteen days. The nature of emergency could include natural disasters, emergencies on the railways or the maintenance of “any structure or system pertaining to irrigation, water supply, drainage, road communication or electricity”. The Act did not specify exact circumstances when the Collector could put the clause to use.[464]

The British-era land acquisition law gave the Collector sweeping powers to invoke the clause. In fact, “what constituted an urgent situation was entirely a function of the Collector’s interpretation”.[465] As Ramesh and Khan write: “Section 17 of the Land Acquisition Act, 1894, was used to forcibly dispossess people of their land in a frequent and brutal fashion by suspending the requirement for due process…. Section 5A… allowed for a hearing of objections to be made but put no responsibility on the Collector to take those claims into consideration.” So people could complain, but it was up to the Collector whether he wanted to listen to them or not. Furthermore, as mentioned earlier, the definition of urgency was also left “to the authority carrying out the acquisition”.[466]

This clause allowed the collector to “take possession of the land within fifteen days of giving notice”. He could take possession of a building within 48 hours of giving notice.[467] While the amount of compensation being offered could be challenged in court, yet Section 24(1) of the law made it very clear that the Court “shall not take into consideration… the degree of urgency which has led to the acquisition”. In the recent past, the urgency clause was used to acquire land for the Outer Ring Road project in Hyderabad as well as the Yamuna Expressway built in Uttar Pradesh.

While the Outer Ring Road was a government project, the question is: How and why did the government acquire land for the Yamuna Expressway, which was a private project of the Jaypee Group?

****

Initially, the Land Acquisition Act of 1894 allowed the government to

use the doctrine of eminent domain to take over land only if it was for a public purpose, like building roads, railways and canals, or a social purpose, like setting up government-run schools and hospitals. The Act also allowed the acquisition of land by the government for a company. Initially, the acquisition of land was restricted to railway companies. This is how things were until 1933, when an amendment was brought in allowing the government to acquire land for a private company for "the erection of dwelling houses for workmen employed by the Company or for the provision of amenities directly connected therewith".[468]

This was again changed in 1962. As the *Standing Committee Report on the Land Acquisition Rehabilitation and Resettlement Bill, 2011*, points out: "The ambit of the Land Acquisition Act of 1894 was then significantly expanded by a number of amendments in 1962, which permitted acquisition for a Company which is engaged or is taking steps for engaging itself in any industry or work which is for a public purpose."[469]

It needs to be pointed out here that even though the government was allowed to acquire land for companies under the 1894 Land Acquisition Act, it continued to own the land and collected rent from these companies. The land was leased to the private companies.[470] In 1978, the 44th Amendment to the Constitution of India was brought in. This changed the Right to Property from a fundamental right to a legal one. This meant that no one could challenge the acquisition of private property by the government under the doctrine of eminent domain in the courts on the grounds that a fundamental right was being violated.[471]

A major revision of the 1894 Act took place in 1984. In total, 21 sections were amended. Along with this, five new sections were added and one section was left out. This was the largest set of amendments that had ever been carried out to the Act in the nearly 120 years of its existence (between 1894 and 2013).[472]

This significant amendment to the Act allowed the government to acquire land for a public purpose for a company. As the Standing Committee Report pointed out: "The amendments made in 1984 to the Land Acquisition Act, 1894, extinguished any differentiation between acquisition for a State purpose and acquisition for a private enterprise or State enterprise by amending Section 4 of the original Act to insert the words 'or for a Company' after 'any public purpose'."[473]

This essentially opened the floodgates and led to the notoriety that land acquisition in India by the government has since come to be known for. In fact, state governments used this change to help acquire land for companies engaged in the manufacture of shoes, air conditioners, and even compressors. Land has also been acquired for hotels, swimming pools, and even golf courses, for that matter. And if all this wasn't enough, land was acquired for housing colonies, ashrams and entertainment establishments.[474] Many of these land acquisitions were made under the urgency clause. [475] This, of course, turned out to be a double-whammy for the landowners.

Of course, none of these enterprises for which various state governments helped acquire land had a public purpose. It needs to be mentioned here that land happens to be listed in the State list of the Indian Constitution, which allows only state governments to make laws on land and land-related matters. But the acquisition and requisitioning of property happen to be on the Concurrent list, given that many national projects are of an inter-state nature, in particular those related to the creation of physical infrastructure, like roads and the railways.[476] This gives both the central as well as the state governments the power to acquire land under the doctrine of eminent domain.

In the 1975 Indrajit C Parekh versus the State of Gujarat case, the Supreme Court upheld the contention of the Gujarat government, which claimed that even a contribution of one rupee from the state exchequer by the state government was "sufficient to validate the acquisition" of land for private companies. This judgement has been used by various state governments over the years to justify the acquisition of land for private companies. In fact, some states have gone to the extent of contributing as little as Rs. 100 from the exchequer and then acquiring land for a private company.

The Supreme Court has also gone on the record as saying: "The concept of public purpose has to be held to be wider than 'public necessity'." It has used this to permit the usage of the doctrine of eminent domain for the acquisition of land by state governments for the construction of a paper mill or a factory manufacturing (electrical) compressors.[477]

States have also used such Supreme Court decisions to acquire land

for a supposedly public purpose and then diverted it to a private company.[478]

Take the case of the Yamuna Expressway. In 2009, the Uttar Pradesh state government acquired land from farmers and later sold it to the Jaypee Group at multiple times the price that had been paid to the farmers. This led to the farmers protesting. These protests turned violent, and several lives were lost as well.[479] The Greater Noida Development Authority had bought land at Rs. 820 per square metre from the farmers and then sold it to real estate developers. When the land was sold to the real estate developers to build apartments, the cheapest rate that the Authority had charged was Rs. 35,000 per square metre.[480] This was basically daylight robbery!

There are several reasons as to why private companies like state governments buying land for them. First and foremost, land records in India are at best fuzzy. What we have in India until now is what the urban planner Swati Ramanathan calls *presumed ownership*. As she explains in a newspaper column: "The notion that a 'sale deed' is proof of ownership is misplaced." The registration of property just acknowledges that "a transaction has taken place between two parties". It does not guarantee in any way that the seller of the property was the indisputable owner or that the buyer is the new owner.[481] This explains why so many property cases end up in court. It is because a clear proof of indisputable ownership of land simply does not exist in India.

As Morris and Pandey write in 'Towards Reform of the Land Acquisition Framework in India': "The deeds registration system is not guaranteed by the State and is inconclusive, typically leaving buyers with 30 years of title deeds to assess."[482]

However, it needs to be mentioned here that the state of Rajasthan has taken some positive steps towards establishing clear land titles in the recent past. On April 4, 2016, the Rajasthan Assembly passed the Rajasthan Urban Land (Certification of Titles) Bill. This legislation will give a statutory backing to land records. In the process, Rajasthan became the first Indian state to enact a law on property titles.

With the Bill being passed, the Rajasthan government will have to get around to setting up the Urban Land Title Certification Authority. Anyone who wants a land title will have to apply to this authority. The act of applying for a title to this authority is voluntary.

As Section 23 of the Act points out: “As soon as may be, after… receipt of [the] application… the Certification Authority shall scrutinise the information and the documents furnished by the applicant and seek their verification from the relevant record maintained by the State Government or any other authority to satisfy himself about the veracity of the information and authenticity of such documents.”

If the Land Title Certification Authority is satisfied “about the veracity of the information and authenticity of such documents”, it will certify the “status of [the] applicant as [the] lawful holder of [the] title of the urban land specified in the application”. This initial provisional certificate will be valid for a period of two years.

If, during the period of those two years, no counter claim or objection is received by the Land Certification Authority, it will, after the two years are over, issue a permanent certificate of title for the land. The state government shall stand as a “guarantor for the genuineness and authenticity of the title”.

This guarantee will go a long way in establishing clear land titles in the state of Rajasthan. This data will be maintained on the Computerised Land Evaluation and Administration of Records (CLEAR) system, a central system of electronic data storage. If the entire system works as it is envisaged to, then the number of property disputes is likely to come down, given that people will have a clear title to the land that they own. This will be guaranteed by the state government.

Clear titles would also lead to the unlocking of what the Peruvian economist Hernando de Soto calls *dead capital*. De Soto essentially points out that, in the Western countries, land and buildings are also used as capital because land titles are clear. This is not the case in developing countries like India. He calls these assets in developing countries dead capital.

As he writes in *The Mystery of Capital—Why Capitalism Triumphs in the West and Fails Everywhere Else*: “Why can’t buildings and land elsewhere in the world also lead this parallel life?… My reply is: Dead capital exists because we have forgotten that converting a physical asset to borrow money to finance an enterprise, for example, requires a very complex process.”[483]

The presence of clear land titles essentially simplifies the entire idea of being able to borrow against dead capital. As de Soto writes:

“Any asset whose economic and social aspects are not fixed in a formal property system is extremely hard to move in the market. How can the huge amounts of assets changing hands in a modern market economy be controlled if not through a formal property process?”[484]

The lack of a formal property system hurts. As de Soto writes: “Without such a system, any trade of an asset, say a piece of real estate, requires an enormous effort just to determine the basics of the transaction: Does the seller own the real estate and have the right to transfer it? Can he pledge it? Will the new owner be accepted as such by those who enforce property rights?”[485]

In this scenario, it becomes difficult to sell land/buildings as well as raise capital by borrowing against it. Once the titles become clear and the government guarantees it, the problem gets solved. Also, with clearer titles, corporates are a little more likely to acquire land for their projects on their own than wanting the government to do it for them.

There are further benefits of clearer land titles. India has 12 crore, or 120 million, small and marginal cultivators and 85 lakh retail outlets. A strong land record title system would let these entrepreneurs “prosper and gain the benefits of economic growth”.[486]

If what has started in Rajasthan spreads to other parts of the country, including rural India, there would be other benefits as well. As mentioned earlier, the average size of an agricultural land-holding has been falling over the decades.

As the same land is divided between more and more family members over the generations, the average landholding size has fallen dramatically. Furthermore, as per the Agriculture Census of 2010-11, small and marginal holdings of less than two hectares account for 85 per cent of the total operational holdings and 44 per cent of the total operated area.

In fact, the variation in average landholding size across states is huge. Hence, the smaller the landholding, the more the number of landlords/farmers that have to be dealt with. As Chakravorty points out: “In Kerala, where 96 per cent of all landholding[s] are marginal, the average marginal holding size is 0.35 acres. In Bihar, where almost 90 per cent of all holdings are marginal, the average marginal holding size is 0.62 acres.”[487]

Chakravorty has used data from the 2005-2006 agricultural census. How do things look if we were to use data from the 2010-2011 agricultural census? The above paragraph would read as follows: “In Kerala, where 96 per cent of all landholdings are marginal, the average marginal holding size is 0.33 acres. In Bihar, where almost 91 per cent of all holdings are marginal, the average marginal holding size is 0.61 acres.”

As we can see, the numbers haven’t changed much between 2005-2006 and 2010-2011. Chakravorty further points out: “In both these states [i.e., Bihar and Kerala], the marginal holdings make up a little over half of all [the] agricultural land area. In Tamil Nadu, Uttar Pradesh and West Bengal, over 75 per cent of all landholdings are marginal. It may be very difficult to bring these lands to the market.”[488]

In Bihar, farmers with marginal land own 57 per cent of all the agricultural land. In Kerala, the number, as of 2010-2011, stands at 58.6 per cent. In Tamil Nadu, Uttar Pradesh and West Bengal, 90 per cent, 79 per cent and 82 per cent, respectively, of all landholdings are marginal.

What this means is that the moment a large area of land needs to be acquired for an infrastructure project, or for setting up a factory or digging a mine, a large number of landholders need to be dealt with. And this is not easy.

Furthermore, many other states, like Gujarat, Rajasthan and Punjab, have larger-sized average landholdings. How do things look in these states if we use the 2010-2011 agriculture census data? The average large landowner in Gujarat owns around 52 acres. The average size of a landholding in Punjab is around 9.3 acres.

Hence, it is easier to acquire land in some states (like Gujarat) than it is in others (like Kerala). The situation would have only got worse since 2010-2011, given that data beyond 2011 is not available as yet.

Clear land titles can clearly help India’s 120 million (12 crore) small and marginal cultivators. It is important that what has started in Rajasthan start to spread in other parts of the country as well and that other states get around to passing a similar law. These are the issues that the government needs to be concentrating on in order to make the life of the average citizen easier. But that, as we have seen throughout this book, isn’t really the case.

****

There are several other reasons that corporates like governments acquiring land for their ventures. As seen earlier (in Chapter 4), the average size of an agricultural landholding has only got smaller over the years. The average size of an agricultural holding has fallen by 59 per cent to 1.16 hectares between 1970 and 2010. This means that, if any corporate wants to acquire land on its own, it has to deal with a large number of individuals. Take the case of Singur in West Bengal, where Tata Motors wanted to establish the plant which would manufacture the Nano automobile.

The 1,000 acres of land (or around 405 hectares, given that one hectare equals 2.47 acres) acquired in Singur came in such small land parcels that there were nearly 12,000 owners to be dealt with.[489] No corporate has this kind of bandwidth. In fact, the probability of ending up with a legal glitch when dealing with such a large number of people is very high.

As Maitreesh Ghatak and Parikshit Ghosh write in a research article titled 'The Land Acquisition Bill: A Critique and a Proposal': "To get a quantitative sense of the problem, suppose that any particular private transaction has a 1 per cent chance of facing a court challenge, causing significant delays. A single or a handful of such transactions has a very good chance of proceeding without a glitch. Simple calculations show that the probability of at least one such legal snag developing (and a single dispute is enough to hold up the entire project) rises to 63 per cent for 100 plot sales, and 99.99 per cent for 1,000 plot sales. For the kind of numbers involved in Singur and many other places, without government participation, a legal quagmire is virtually a certainty."[490]

Then there is the issue of Change in Land Usage (CLU). Agricultural land beyond a certain size cannot be owned, as per the land ceiling regulations. This limit varies from state to state. What this does is that it limits the way a company can go about buying land that it needs for a particular project. A corporate wanting to set up a project cannot buy land beyond a certain size. Furthermore, it is not possible to buy the land and then appeal to the state government for a change in land usage. In order to get a change in land usage clearance (say from agricultural to industrial), a company needs to acquire land beforehand, and that is not possible given that agricultural land beyond a certain size cannot be owned.[491] So, this is a bit of a

chicken-and-an-egg situation, something which is an outcome of Big Government yet again.

On the flip side, the farmer who owns the land and wants to sell it and is looking for a buyer is also not granted a change in land usage.[492] Hence, private companies looking for land for reasonably big projects end up approaching the state government. Actually, the entire system the way it is structured is rigged in favour of politicians, who are in positions to be able to grant change in land usage permissions.

As Ram Singh writes in a research article titled 'Inefficiency and Abuse of Compulsory Land Acquisition—An Enquiry into the Way Forward', "the formal and informal (kickback) costs of these clearances", especially the change in land usage permissions, "are said to be a significant component of the project costs". In fact, for real estate companies, as well as small and medium enterprises, these costs are as big as the cost of the land itself.[493]

Hence, it makes sense for private companies to operate through the state government for the simple reason that any land acquired by the state government automatically comes with change in land usage clearances. They don't have to be separately applied for and dealt with. As Singh puts it: "When land is compulsorily acquired and given to a private company in the name of a public purpose, the CLU clearances are not needed or are provided along with the land. Therefore, the project developers are better off bribing the powers that be and getting them to acquire the needed land. In fact, this route has added advantage for project developers."[494]

Furthermore, when land is acquired by the government for private companies, it proves to be cheaper in comparison to when the companies try to buy it directly from the landowners. Other than the change in land usage clearances, the government acquiring land for the private companies also brings down the transaction costs of having to deal with poor land records as well as disputes.

As Ghatak and Ghosh point out:[495]

> The single most important reason the State's participation is essential in large-scale land acquisition for industry has to do with reduction of transaction costs and expedition of the process. The market often works well in arranging bilateral transactions, but its effectiveness drops exponentially as the number of parties to the transaction grows large, especially in a country like India, where property rights are poorly defined, land records are fuzzy and courts work at a

> glacial pace. One must keep in mind that a legal problem may crop up even after a private sale has been completed; for example, if the ownership of a plot of acquired land was under dispute, its sale could be challenged in court by other claimants to the property, taking years to resolve and holding up the project due to a stay order till the ownership issue is settled.

The question to ask is how transaction costs can be brought down so that private companies can carry out land acquisition by dealing directly with the landowners. There is a great need for better quality land titles. In this regard, other states need to follow what Rajasthan has done and come up with a law and a system that will give a statutory backing to land records. This should make the entire system more transparent and make it easier for everybody.

As Singh puts it:[496]

> There is an urgent need to update and digitalise land records related to ownership and type of land. These records should be tamper-proof and made available publicly, so that they can be used by owners, potential buyers and courts for verification of titles. There should be real-time coordination between the agencies responsible for [the] registration of land deals and those responsible for [the] maintenance of land records. As such, these measures will go a long way in facilitating voluntary transactions by clearing any uncertainty over ownership of land.

But of course this change isn't going to happen overnight. The state-level politicians have an incentive in keeping the system going as it currently is. It works to their benefit. Another change that can make land acquisition easier is the doing away of the artificial distinction between agricultural and non-agricultural land. In fact, there have been a few occasions whereupon private companies have been granted exemptions from change in land usage clearance as well as other regulations and they have been able to buy a large area of land on their own. A good example of this is the Gurgaon Special Economic Zone, in which case the developers were able to buy several pockets of hundreds of acres of land. Nevertheless, the project got stuck because it needed around 10,000 acres of contiguous land. There are several other examples as well.[497]

Again, it is in the interests of the state-level politicians not to change the current way of doing things. Typically, the land acquired by the government for private companies on the edges of cities tends to be agricultural land. With the change in land usage—commercial, industrial or even residential—the land tends to be valued at 30 times the value of the agricultural land.[498]

This is the value that the state-level politicians as well as private companies want to capture. And this leads to private companies having to bribe state-level politicians in order to get the government to acquire land for them. It all goes against the farmer who wants to sell land, because he can only sell it as agricultural land. Hence, Big Government basically goes against a proper market transaction which works well for everybody.

In fact, there have been examples of landowners coming together and carrying out collective bargaining. More than 1,000 farmers from the Avasari Khurd village around forty kilometres north of Pune on the Pune-Nashik highway came together in 2007 to form a special purpose vehicle to set up a multi-product Special Economic Zone. The trouble was that, over time, the farmers themselves got divided in line with their respective political affiliations to the Congress Party and the Nationalist Congress Party.[499] Farmers in Haryana (closer to Delhi) have become extremely rich by selling land to real estate companies at proper market prices.

Or take the case of Magarpatta City, a 400-acre complex on the outskirts of Pune. The complex was developed by a cooperative of farmers. This allowed the farmers to be formal stakeholders in the project and to be a part of the ownership benefits over a period of time. Such collective bargaining needs to be encouraged.[500] In fact, by encouraging such collective bargaining and getting rid of the artificial distinction between the different types of land, the urbanisation problem can be tackled as well, with more land becoming available on the outskirts of cities to build affordable residential apartments. But, again, it goes against the economic incentives of state-level politicians.

It is worthwhile asking here how the situation is in other countries. Do governments acquire land for private companies? Or is the situation in India an exception?

Let's start with China. In China, all land is owned by the government (or should we say the Party?). If all the land is owned by the government, then it's a question of allotting land and not acquiring it. But China is an authoritarian state. How are things in successful democracies around the world? In the United States, the acquisition of land by the government for private companies under the doctrine of eminent domain became fairly controversial. This led to the Supreme Courts of several American states, like Oklahoma, South Carolina, Illinois and Michigan, placing bans on the acquisition of

land by the government for private companies. The final impact of this was that the then President, George Bush Jr., had to issue Executive Order No. 13406 on 23rd June 2006. This mandated that the government could acquire land only for "the purpose of benefiting the general public and not merely for the purpose of advancing the economic interest[s] of private parties to be given ownership or use of the property taken".[501]

The European Union has no provision for the acquisition of land by the government for private companies. In Japan, the land required is obtained through negotiations with the landowners. Take the case of the expansion of Tokyo's Narita International Airport. The main mode of obtaining land was through "extensive negotiations and higher compensation packages offered to those who were willing to sell their land". In Canada, acquisition of land by the government under the doctrine of eminent domain is allowed, but "not to further the commercial interests of a private company".[502]

So, the acquisition of land by the government for private companies is clearly not the norm in developed democracies. As the Standard Committee Report points out: "It may be seen that, in all developed democracies, [the] private purchase of land, not State acquisition, is the norm. There is no provision in their laws for the State acquisition of privately held land for profit-making private enterprises, nor, by extension, for public-private enterprises. From the position enumerated above, it may be seen that, in India alone, public purpose is defined as to include virtually every form of enterprise, particularly after the amendments made in 1962 and 1984 to the 1894 Land Acquisition Act."[503]

****

What all this clearly shows is that the system, as it came to be structured, was essentially loaded against the landowner/farmer. In the recent past, the government has acquired land for private companies. This has led to the impression that politicians and the crony capitalists who operate through these politicians have been primarily responsible for displacing people for land. This is not the total picture.

The government acquiring land for its various projects is the primary reason for the displacement of people. As Chakravorty writes:[504]

> The really large categories of displacement impact are really entirely in the domain of the state—water (over 38 per cent of displacement), transportation (almost 15 per cent), welfare and administration (almost 13 per cent), and environment (over 9 per cent) are the top categories. The two categories where the private sector has a significant, but not exclusive, role are industry and mines, which together account for less than 15 per cent of the total impact. Remember that really large industrial projects are steel plants and [the] attached townships created by the state, and big mining items like coal and oil are almost entirely under state ownership. Also note that a really large state project, like the Sardar Sarovar Dam, which needs several hundred thousand acres (estimates vary), is several hundred times larger than a *cause célèbre* like the Nano factory at Singur [which never really took off], which needed a mere 1,000 acres.

All this leads Chakravorty to conclude that the private sector has been responsible for only 10 per cent of the impact, whereas the governments (both the central government as well as the state governments) have been responsible for 90 per cent or more when it comes to displacing people.

A distinction needs to be made here between the land acquired before 1991 and that acquired after 1991. In fact, 1991 was the year when the PV Narasimha Rao government initiated economic reforms. Since 1991, the government has been acquiring more and more land for private companies.

While public sector enterprises may not have been the best way to go about creating economic growth in India, given that India's primary strength was labour, they did fulfil some amount of public purpose. As Michael Levien writes in a research article titled 'From Primitive Accumulation to Regimes of Dispossession—Six Theses on India's Land Question':[505]

> Since 1991, India has passed from a regime that dispossessed land for state-led industrial and infrastructural expansion to one that dispossesses land for private—and increasingly financial—capital. Between 1947 and 1991, the Indian state largely dispossessed land for public-sector projects to expand the industrial and agricultural productivity of the country. The main forms of this dispossession were public sector dams, steel towns, industrial areas and mining.

Let's take the case of steel towns, a major reason for which land was acquired after Independence. As Levien writes: "India's public sector steel towns provided relatively high quality employment to tens of thousands of people, including many of those whom they [had] displaced…. They had huge linkages with the domestic economy and generated ancillary industries in their vicinity. And their revenues were captured by the state. Even dams, for all their many problems, at least produced electricity and provided irrigation to hundreds of thousands of farmers."[506]

The same cannot be said for the land acquisition that has been carried out by the government for the private sector post-1991. As we have seen earlier, land was acquired by the government for the private sector for things like swimming pools and golf courses, which really did not serve any public purpose. Of course, the companies running these projects got the land cheaply as well.

In 2005, the Congress-led United Progressive Alliance (UPA) government passed the Special Economic Zones (SEZs) Act. In fact, SEZ, in the Indian case, is an umbrella term used for more specific zone types which include Export Processing Zones (EPZs), Free Trade Zones (FTZs), free ports, Free Trade Warehousing Zones (FTWZs), etc. Interestingly, India was the first country in Asia to set up an SEZ. The first EPZ, set up in Kandla in Gujarat in 1967, was Asia's first SEZ. This was followed by the Santa Cruz Electronics Export Processing Zone (SEEPZ), which was set up in Mumbai in 1972. In 1984, four more EPZs were set up in Noida, Cochin, Falta (in West Bengal) and Chennai. In 1989, another EPZ was set up in Vishakhapatnam. These EPZs are referred to as the first generation of SEZs set up in India.[507]

But the real boom in SEZs came after the 2005 SEZ Act was passed by the UPA government. And this is when the real trouble started. In fact, hundreds of SEZs were approved over the next few years. Between 2006, when the rules of the SEZ Act were put forward, and mid-2010, 570 SEZs had been formally approved. More than 70 per cent of these SEZs were in Andhra Pradesh, Gujarat, Karnataka, Maharashtra and Tamil Nadu. While the total land that was acquired by these SEZs wasn't huge, yet they did manage to create potential sites of conflict all over the country.[508]

This was primarily because of the way that the land acquisition policy for SEZs had been structured. If the promoters managed to buy 70 per cent of the land, the government would help acquire the remaining 30 per cent. In some cases, like Nandigram in West Bengal, the government even volunteered to acquire 100 per cent of the land for an SEZ to be developed by the Indonesia-based Salim Group. In fact, in March 2007, the West Bengal government sent 2,500 policemen to capture the land. In the firing that followed, as per the police records, 14 farmers were killed and over 100 were declared missing.[509]

The reason that the state government of West Bengal and other state governments wanted to acquire land for SEZs was to attract private investment in the state. As Nirupam Sen, the then Industries Minister of West Bengal, explained: "Providing land is one of the most important things, you see, because until and unless you get hold of the land, there is no question of setting up industry…. That is the most important input. If you don't get it, if you cannot provide it, then they [i.e., private companies] will seek somewhere else where they can get that land."[510]

This became a sort of a race to the bottom. As Levien puts it: "According to both government officials and industry representatives that I interviewed in seven states, the ability of state governments to dispossess peasants has become of critical importance in the inter-state competition for investment."[511]

In fact, investor capital always has the option of fleeing to another state where the land prices are lower. As Levien puts it:[512]

> Capital can always flee to states that are better able to politically manage giving lower [land] prices—Andhra Pradesh, Tamil Nadu and Gujarat, for example, all acquire land without giving particularly high compensation (though not without problems). This generates a race to the bottom. As an official with the Haryana Indus trial Development Corporation told me, since Haryana put into place its unprecedentedly high remunerative compensation policy at the behest of powerful farmers' groups, high land prices have become a deterrent to investors, who are going to other states.

Also, the SEZs were used to set up non-labour-intensive industries, like information technology. Estimates suggest that almost twothirds of the SEZs are in the information technology and information technology-enabled sectors. These companies like to set themselves up in SEZs because it gives them a tax advantage.

Furthermore, the acquisition of land for SEZs essentially morphed into a real estate scam. In the case of the Indian SEZs, the government's role was limited to *forcibly* acquiring land. As a Commerce Ministry official put it, India's SEZ model "is not strictly PPP [Public-Private Partnership] because the government is not putting a single penny in. It's purely privatised".[513]

The private companies were expected to build the SEZ, unlike in China, where the government actually built the SEZs. It was argued that the government itself could not build the infrastructure required at the scale that had been envisioned. And perhaps that was true as well. But the other option, i.e., of getting the private sector to build it,

ultimately morphed into a land-grabbing exercise.

Initially, the processing area in any SEZ was supposed to be a minimum of 35 per cent of the total area of the SEZ. The processing area is essentially the area for the setting up of "units for activities, being the manufacture of goods or rendering services". This was later increased to 50 per cent.

The remaining area was referred to as the non-processing area. The SEZ rules allowed residential and commercial complexes to be built in this area. As Michael Levien writes in 'Regimes of Dispossession: From Steel Towns to Special Economic Zones': "While the manufacturing sector lobbied for the liberal concessions that were made available to exporting companies within SEZs, real estate companies and large corporate houses actively lobbied for the opportunity to privately develop them. An official overseeing the SEZ unit of a major Indian industry association explained to me that real estate developers lobbied for SEZs because they would be 'very low cost' as the government would 'provide some benefits like basic infrastructure facilities… as well as [the] cheapest land'."[514]

Hence, SEZs were seen as an opportunity to build residential complexes on cheap land on the outskirts of cities. As Levien puts it:[515]

> Since the highest value land use is housing, most developers saw SEZs as an opportunity to build satellite cities on cheap government-acquired land at the urban periphery in the midst of an unprecedented real estate boom. Some profit could be made by reselling agricultural land as 'developed land parcels' — in the words of one SEZ executive — to industry; more profit would be made by developing housing and other urban amenities. Consequently, SEZs became an outlet for speculative real estate capital, which explains the scale and speed with which they spread across the country — 464 were approved in the first sixteen months.

This brazen acquisition of land by the governments using the SEZ Act was the tipping point. Years of discontent finally started to manifest themselves, and there were protests. Other than Nandigram, protests were seen in places like Singur in West Bengal, Raigad in Maharashtra, Kalinganagar, Niyamgiri and Jagatsinghpur in Odisha, and Bhatta Parsaul in Uttar Pradesh. There were also protests in Odisha at the site of the $12 billion steel plant which was to be established by the South Korean company POSCO. This was also India's biggest foreign investment. The brazenness of the land acquisition also got the intelligentsia and the NGOs involved in the protests against the same.

Ultimately, these protests found their voice in Parliament as well, with the Members of Parliament (MPs) across party lines talking about it. Consider what Sher Singh Ghubaya, a Lok Sabha MP belonging to the Shiromani Akali Dal party, had to say: “In India, we have created about 550 SEZs in recent times. This is a very high number. Nowhere in the world have these many numbers of SEZs been created. It seems as if bungling, malpractices and irregularities at a large scale are going on in the creation of SEZs. The land mafia is indulging in loot and plunder in collusion with powerful and corrupt elements, whereas the original landowners have been left in the lurch.”[516]

Ajay Kumar, a Lok Sabha MP from Jamshedpur and belonging to the Jharkhand Vikas Morcha Party, had this to say: “Until now, 500 SEZs have been established. A newsreport had come [out] that said that, of these, 300 SEZs are not being used for the reasons they were originally established for.” [517]

Asaduddin Owaisi, a Lok Sabha MP from Hyderabad and belonging to the All-India Majlis-e-Ittehadul Muslimeen Party, had this to say: “Land under SEZs around Hyderabad is going to the real estate companies. On the one hand, you say that you do not appreciate SEZs, and on the other, all the SEZ land has gone to the real estate companies. Blatant abuses of land are happening around Hyderabad.”[518]

In fact, in November 2011, the Supreme Court said: “It has been felt that the Land Acquisition Act, 1894, does not adequately protect the interest[s] of owners/persons interested in the land. For years, the acquired land remains unused. To say the least, the Act has become outdated and needs to be replaced at the earliest with fair, reasonable and rational enactment in tune with the constitutional provisions.”

Finally, on September 5, 2013, Parliament passed the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act (RFCTLARR). This Act came into force from January 1, 2014. After nearly 120 years, the Land Acquisition Act of 1894 was finally given a state burial.

****

So what were the salient features of the land acquisition Act of 2013 that made it different from the Land Acquisition Act of 1894? The definition of urgency has been curtailed under the new law. The enormous power that the government and the collector had in the 1894 law has been done away with.

As per Section 40 of the 2013 Act, the urgency clause to acquire land can be invoked by the government only in the following two cases: a) national defence and security purposes; and b) resettlement and rehabilitation that needs to be carried out in the event of a natural calamity, like a flood or an earthquake. The Act also allows the acquisition of land under the urgency clause for any other emergency subject to the approval of Parliament.

Hence, the totally random way in which land was being acquired in the past to serve a private purpose instead of a public one cannot happen under the new Act.

The term ‘public purpose’ was fairly loosely defined in the 1894 Land Acquisition Act. Almost anything could have been passed off as a public purpose. As the Supreme Court said in the Rajiv Sarin versus the State of Uttarakhand case on August 9, 2011: “In the last sixty years… the concept of public purpose has been given quite a wide interpretation.”

The 2013 land acquisition Act limited the definition of public purpose for the acquisition of land for: a) strategic defence purposes and national security; b) infrastructure projects, which does not include private hospitals, private educational institutions or private hotels; c) project-affected families; d) housing for residential purposes for the poor and the landless; e) housing for a specified income group; f) educational schemes run by the government; g) national investment and manufacturing zones as defined by the National Manufacturing Policy; and h) industrial corridor or mining activities, and so on.

What is interesting is that the Act did not make the acquisition of land for a private company illegal. The government could still acquire land for a private company or even for a public-private partnership as long as the activity being planned came under the definition of a public purpose.

Furthermore, the Act also requires the consent of the people from whom the land is being acquired. The 2013 Act needs the consent of 70 per cent of the families affected by the acquisition of the land in the case of a public-private partnership. If the land is being acquired by the government for a private company, then the consent of 80 per cent of the families affected by the acquisition is required. The affected families aren't just defined as the landlords who own the land that is being acquired. It also includes families whose livelihood over the previous three years has been dependent on the land being acquired. In urban areas, any family living on the land being acquired would also be treated as an affected family.

This definition is in line with the fact that disguised unemployment in India is high and that not just landlords are dependent on the land that they own.

Jairam Ramesh, a minister in the UPA government and who was a key architect behind the 2013 Law, has clarified in his book *Legislating for Justice* that the 70-80 per cent levels had been thought through and were not just random figures. It was felt that the consent required should not be in a position to be manipulated, and hence, should be sufficiently wide. Secondly, it was important that the consent of a sufficiently large number of the people who are to be displaced by the particular case of land acquisition be taken into account so that they would also be involved in the development process.

Of course, there are cases in which consent isn't required. Consent isn't required if the government acquires land for its own use and control without selling it to private parties.

The 1894 Act provided a compensation of 1.3 times the market value of the land that was acquired. The 2013 Act's compensation formula is a little more complicated than that. First, it pays the market value of the land. The market value is defined as the higher of "the minimum land value, if any, specified by the Indian Stamp Act of 1899 for the registration of sale deeds in the area where the land is situated; and the average of the sale price for a similar type of land situated in the immediate areas adjoining the land being acquired,

ascertained from fifty per cent of the sale deeds registered during the preceding three years, where a higher price has been paid".[519]

Secondly, other assets on the land at the time of acquisition, like buildings, trees, wells, agricultural crops, etc., also need to be paid for. The market value of the land, along with the value of the other assets, forms the total compensation. A solatium of 100 per cent of the total compensation needs to be paid as well. This basically means that anyone living in an urban area and whose land is being acquired needs to be paid twice the value of his land as well as the total assets on the land.

When it comes to rural areas, a multiplier factor of up to twice the total compensation comes into play, depending on how far the rural area where the land is being acquired is from the nearest urban area. Hence, if the land being acquired is in a rural area, a payment of up to four times the market value of the land as well as the assets on the land has to be made (see Table 8.1).

Table 8.1: Multiplier factors for the compensation offered under the 2013 land acquisition Act.

Radial Distance from an Urban Area (km)	Multiplier Factor
0-10	1
10-20	1.2
20-30	1.4
30-40	1.8
40-50	2

Source: *The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act (2013) – An Overview*.

Hence, if the land being acquired is within ten kilometres of an urban area, then the payment will be similar to the one being made if a similar piece of land were to be acquired in an urban area. If the land acquired is 20-30 kilometres away from an urban area, then the compensation would be 1.4 times the urban compensation. This would mean a compensation of 2.8 times (1.4×2) the market value of the land as well as the total assets on it. Also, it needs to be said here that the "sliding scale on the basis of which compensation is to be calculated (2-4 times the market value) has been left to the discretion of the State Governments".[520]

Several states have decided to offer the same compensation for

both urban as well as rural areas. Take the case of Haryana. The compensation has been fixed at twice the market value and the value of the assets on the land irrespective of whether the land is in a rural area or an urban area. Defending the decision, a senior bureaucrat of the Haryana government said that this had been done “to avoid discrimination and dispute”.[521] Of course, it also brings down the total amount of money that the government would have to pay for land.

Madhya Pradesh also follows the same compensation formula as Haryana, at two times the market value and value of the assets on the land. The newly formed state of Telangana offers a compensation of three times the market value and value of the assets on the land in rural areas. The compensation is four times in rural areas in tribal belts. In Andhra Pradesh, the compensation is two and a half times in rural areas and three times in rural areas in tribal belts. In the case of Maharashtra, the compensation has been fixed at a little over two times for any kind of land within the state. In Karnataka, the compensation has been fixed at four times, unless the land is within five kilometres of municipal limits, in which case the compensation is three times.[522]

Interestingly, in cases where the land is being acquired for a company, the company can offer the landowners compensation in the form of shares of the company. This compensation cannot be more than 25 per cent of the total compensation that needs to be offered.

Other than recognising consent and offering compensation, which is much greater than what was offered under the 1894 Act, a Social Impact Assessment is required for all land acquisitions under the 2013 Act. There was no such provision under the 1894 Act. There are multiple objectives that a social impact assessment seeks to attain:

> a)It needs to be ascertained whether the land being acquired serves a public purpose.
>
> b) An estimation of the number of families that would be displaced due to the land acquisition and an accurate inventory of their holdings needs to be done. In fact, this was one of the major reasons of dispute at Singur in West Bengal, where Tata Motors wanted to establish their plant for the Nano. Many landowners in Singur were undercompensated because their land had been misclassified as low-grade, mono-cropped land rather than high-grade, multi-cropped land.[523]

c) It needs to be ascertained whether the acquisition of land at an alternate place has been considered and found to be infeasible.

d) It needs to be ascertained whether the total land area that is being acquired is the bare minimum that is required for the project under consideration.

e) Also, the extent of lands, public and private, houses, settlements and other common properties that are likely to be affected by the proposed acquisition needs to be ascertained.

The social impact assessment also needs to carry out a cost-benefit analysis, through which the land acquirer has to show that the objective which the project seeks to achieve justifies the cost of displacing the people who own the land as well as that of the people living off the land.[524]

Section 5 of the 2013 land acquisition Act has also made it mandatory for the government, when acquiring land, to take into consideration "the impact that the project is likely to have on various components, such as [the] livelihood of [the] affected families, public and community properties, [and] assets and infrastructure, particularly roads, public transport, drainage, sanitation, sources of drinking water, sources of water for cattle, community ponds, grazing land, plantations, public utilities, such as post offices, fair price shops, food storage godowns, electricity supply, healthcare facilities, schools and educational or training facilities, *anganwadis*, children's parks, places of worship, land for traditional tribal institutions, and burial and cremation grounds".[525]

The social impact assessment is mandatory, except for irrigation projects, and needs to be carried out within a period of six months. It has to be carried out in consultation with the representatives of the Panchayati Raj institutions. The reports that are prepared are to be shared with these individuals in the local language along with a summary.[526] Also, the government which is acquiring land needs to ensure that the social impact assessment report is evaluated by an independent multi-disciplinary expert group.

****

The 1894 Land Acquisition Act had no provisions for rehabilitation

and resettlement. As mentioned earlier, many people were displaced because of the land acquired under the Act. The government had been the primary acquirer of land under this Act. Nevertheless, it never got around to maintaining a record of the number of people displaced by land acquisition. Furthermore, other than the people who own land, in India there are people living on the land and also living off the land. Hence, the number of those displaced due to land acquisition is usually more than just that of the people who own the land.

Also, those who were displaced because of land acquisition were usually not the ones who benefited from it. As Chakravorty explains:[527]

> Dams and reservoirs are built upstream from the regions that get the benefits of irrigation; the electricity generated goes to urban centres, industrial users and farmers who still have the land to run their pumps. Roads and rails carry goods and people through the taken land, enabling commerce elsewhere. Factories built on the taken land make steel or aluminium to be sold in national or international markets. The new townships around these factories house their officers and workers, not the unskilled farmers whose land the factories are built on.

And so the story goes. In fact, once land is acquired and the area develops, the land prices in the area go up. Of course there is no way that people whose land has already been acquired can then benefit from it.

The question is: Why were there no protests until the 2000s, when the government started to acquire land for private companies under the SEZ Act of 2005. In the fifties and the sixties, much of the acquisition was carried out to build public sector enterprises, dams and other physical infrastructure. Hence, there was a feeling of having contributed to the national cause.

In fact, Nehru was aware of people being displaced because of land acquisition by the government. At the stone-laying ceremony of the Hirakud Dam in Orissa on the banks of the Mahanadi river, he had said in his speech to those who were displaced because of the project: “If you have to suffer, you should do so in the interests of the country.”[528]

Also, it is safe to say that the number of people who gained because of land acquisitions clearly outnumbered the number of people who suffered from it. Chakravorty writes that “‘winners’ outnumber ‘losers’ by a factor of well over 100”.[529]

This changed after the government started to acquire land under the SEZ Act. People whose land was acquired or was to be acquired could smell a real estate scam. Over and above this, the explosion of the media and the involvement of non-governmental organisations with the cause had huge roles to play as well.

The 2013 land acquisition Act makes rehabilitation and resettlement of those displaced because of the acquisition of land mandatory. Here are some of the points that the Act lays down with regard to resettlement and rehabilitation:

> a) If the land being acquired is in a rural area and has a house built on it, then the family losing the house shall be provided with a constructed house as per the specifications of the Indira Awas Yojana. If the house that is lost happens to be in an urban area, then a constructed house which will not be less than 50 square metres in plinth area shall be provided.
>
> b) If the affected family does not own the land that is being acquired, but has been living on it for a period of not less than three years preceding the date of notification of the affected area, it shall also be provided with a house. If the family living in an urban area does not want a new house, it shall get a one-time financial assistance for house construction, which shall not be less than one lakh, fifty thousand rupees. In the case of a rural area, the equivalent cost of the house may be offered in lieu of the constructed house if the family does not want a constructed house.
>
> c) Each family which loses land in the case of an irrigation project and whose status has been reduced to that of a marginal farmer or a landless labourer because of the acquisition needs to be provided, as far as possible, with a minimum of one acre of land in the command area of the project.
>
> d) If the land is being acquired for urbanisation, then “20 per cent of the developed land will be reserved and offered to the land-owning project-affected families, in proportion to their land acquired and at a price equal to [the] cost of acquisition and the cost of development. In case the project-affected family wishes to avail of this offer, an equivalent amount will be deducted from the land acquisition compensation package payable to it”.[530]

e) In case the land that is being acquired is for a project which will create jobs, then the affected individuals (one per family) are to be provided with a job, after providing suitable training and skill development, at not less than the minimum wage. Another option is to give a one-time payment of Rs. 5 lakh per affected family. The third option is to give an annuity policy to every affected family. This policy should pay at least Rs. 2,000 per month per family. The amount needs to be adjusted for inflation ever year using the Consumer Price Index for Agricultural Labourers.

f) Also, each family that is displaced due to land acquisition shall be given a monthly subsistence allowance equivalent to three thousand rupees per month for a period of one year from the date of awarding.

g) Each affected family which is displaced shall get a one-time financial assistance of fifty thousand rupees as transportation cost for the shifting of the family, building materials, belongings and cattle.

With these and many other such points, the hope was that the mistakes of the Land Acquisition Act of 1894 would not be repeated. In fact, providing housing as well as land to those displaced make up the major provisions of the rehabilitation and resettlement clauses under the 2013 Act. When the law was being drafted, some state governments were of the opinion that they would simply be unable to find so much land for rehabilitation and resettlement. But these clauses were not changed. As Ramesh and Khan write: "It was decided to stick with this requirement as it would act as a disincentive for wanton acquisition. It would also put pressure on State Governments to utilise their existing land banks more effectively."[531]

****

Initially, there were sixteen (which were later reduced to thirteen) Acts under which land could be acquired without the provisions of the 2013 Act being applicable. This meant that provisions like compensation, social impact assessment, and rehabilitation and resettlement would not apply in the case of land that was acquired under any of these Acts. These remaining 13 Acts are as follows:

1.The Ancient Monuments and Archaeological Sites and

Remains Act, 1958

2. The Atomic Energy Act, 1962

3. The Damodar Valley Corporation Act, 1948

4. The Indian Tramways Act, 1886

5. The Land Acquisition (Mines) Act, 1885

6. The Metro Railways (Construction of Works) Act, 1978

7. The National Highways Act, 1956

8. The Petroleum and Minerals Pipelines Act, 1962

9. The Requisitioning and Acquisition of Immovable Property Act, 1952

10. The Resettlement of Displaced Persons (Land Acquisition) Act, 1948

11. The Coal-Bearing Areas Acquisition and Development Act, 1957

12. The Electricity Act, 2003

13. The Railways Act, 1989.

Land acquired under most of the above-mentioned Acts would be for projects like roads, the railways, the metro, pipelines, powerlines, etc., which are linear (also referred to as row acquisition) in nature. What this means is that when land is acquired for such projects, landowners will not lose all their land, as could be the case with land being acquired for, let's say, an SEZ.

As the Secretary, Department of Land Resources, told the Standing Committee on the Land Acquisition Rehabilitation and Resettlement Bill, 2011:

> There is a slight difference in *en masse* acquisition and row acquisition. Row acquisition is like roads, railways, power supply and all, where very little land is being acquired. The reservation of these concerned Ministries is that if we are to apply rehabilitation and resettlement [R & R] to them, then they will have to provide… infrastructure… which is extensive. For rehabilitation, they will have to set up a school, community centres and other facilities, like post offices, roads, etc. Now, for a small chunk of land, they say that, if we have to be governed by R & R facilities as per the Bill, then it will not serve the purpose. That is why these Acts were actually considered and we thought that row acquisition should not actually form a part [of them].

In fact, the 2013 land acquisition Act made it clear that its provisions wouldn't apply to the above-mentioned thirteen Acts for a period of one year (i.e., until December 31, 2014). It further said that

separate provisions would have to be made in order to pay compensation as well as rehabilitate and resettle the people affected by land acquisition under any of these thirteen above-mentioned Acts. The Bhartiya Janata Party-led National Democratic Alliance (NDA) government promulgated an ordinance in December 2014 and brought an amendment to this effect.

It is interesting to point out here that, in the draft version of the 2013 Act, land acquired under the SEZ Act of 2005 was also a part of the exempted Acts. The Standing Committee of Parliament which looked into the Bill also pointed out the same. As they said: "Inclusion of [the] SEZ Act, 2005, in the Fourth Schedule is a case which doesn't go well with the argument of [the] DOLR [Department of Land Resources] at all, as under this Act, *en masse* acquisition in thousand acres is done. Upto… March 2012, 587 approvals have been accorded for [the] formation of SEZs."[532]

The Fourth Schedule of the 2013 Act has a list of Acts. If land is acquired under any of these Acts, the provisions of the 2013 land acquisition Act do not apply. The Department of Land Resources had told the Standing Committee that exemptions under the Fourth Schedule are necessary because the land acquired under the exempted Acts was essentially row (i.e., linear) acquisition. But that wasn't the case with the SEZ Act of 2005, where *en masse* acquisition of land was being carried out.

The Standing Committee Report also quotes a response which they received from the Madhya Pradesh government and which summarised the feelings people had towards land acquisition being carried out for SEZs at that point of time: "There are 16 legislations which are being temporarily protected, which include even the SEZ Act, which gave birth to all these controversies on the question of land acquisition." Other than the SEZ Act, the Cantonments Act, 2006, and the Work of Defence Act, 1903, had also been originally placed in the list of exempted Acts. But the Defence Ministry clarified to the Standing Committee that it had not asked for an exemption from the Bill (which would become the 2013 land acquisition Act) and that it would undertake all the compensatory provisions.[533]

Finally, these two Acts, along with the SEZ Act were dropped from the Fourth Schedule of the 2013 land acquisition Bill when it was passed. Nonetheless, the interesting thing is that something similar to a Special Economic Zone seems to have found its way into the Act.

Section 2 of the Act allows acquisition of land for "national investment and manufacturing zones, as designated by the National Manufacturing Policy".

The National Manufacturing Policy defines national investment and manufacturing zones as "large areas of developed land with the requisite eco-system for promoting world-class manufacturing activity". The national investment and manufacturing zone "would have an area of at least 5,000 hectares in size".

The size of land required to start a national investment and manufacturing zone is much bigger than that required to start an SEZ. The minimum amount of land required to start a multi-product SEZ is 500 hectares. This was revised in September 2013 from the earlier 1,000 hectares. For a sector-specific SEZ, the minimum land required is 50 hectares instead of the earlier 100 hectares. The point being that the land required to establish a national investment and manufacturing zone is many times that of an SEZ. Hence, it will not be as easy to get a real estate scam going in the name of a national investment and manufacturing zone as it was with an SEZ.

****

Before the 2013 land acquisition Act was passed, land acquisition by the government for itself or for a private company was basically more or less a cakewalk. The 2013 Act changed all that and land acquisition has now become extremely difficult. In fact, Jairam Ramesh admits in his book that the idea was to discourage land acquisition. As he and Khan write in *Legislating for Justice*: "The law was drafted with the intention to discourage land acquisition. It was drafted so that land acquisition would become a route of last resort."[534]

After the enactment of the 2013 land acquisition law, the total number of shelved, abandoned or stalled projects went through the roof. Data from the Centre for Monitoring Indian Economy (CMIE) suggests that, in 2013-2014, projects entailing a total of Rs. 6,26,000 crore of investment were shelved, abandoned or stalled. This was the highest in Indian history. The total number of projects shelved, abandoned or stalled stood at 524.[535] Of course, the difficulty in acquiring land was not the only reason for the stoppage of these projects.

As per the CMIE, the major reasons listed were difficulties in land acquisition, the promoter's lack of interest and a delay in getting

environmental clearances. In fact, the Economic Survey of 2014-2015 had listed the land acquisition problem as the top problem for the stalling of government-owned projects.

Actually, the number of stalled projects, expressed in terms of both value as well as volume, had begun to rise in early 2009. Between 2000 and 2008, the average quarterly stalling of projects was around Rs. 14,300 crore. This number started to rise after 2007-2008, when the global financial crisis started in September 2008, after Lehman Brothers, the fourth largest investment bank on Wall Street, went bust. In 2008-2009, the value of the stalled projects rose to Rs. 58,600 crore. In 2009-2010, it was at Rs. 57,300 crore. It fell in 2010-2011 to Rs. 40,200 crore. The quarterly average of stalled projects jumped to Rs. 1,20,000 crore in 2011-2012. It was at Rs. 1,10,000 crore in 2012-2013 and Rs. 1,60,000 crore in 2013-2014.[536]

Private companies, which had previously been able to acquire land under the 1894 Land Acquisition Act by managing the system that prevailed, had to find a totally new way of dealing with things. And of course, they did not like it. This wasn't surprising, given that the manufacturing sector had been totally dependent on the government for the acquisition of land until then.

The need to take the consent of 80 per cent of those affected by the project was seen as an irritant. It was felt that the Social Impact Assessment that needed to be carried out before the land was acquired would make the entire process difficult, complex and lengthy. Furthermore, before the 2013 Act came in, when land was acquired, rehabilitation and resettlement were not mandatory. The 2013 Act made this mandatory, and this would add to the cost of acquiring land. In fact, as Sunil Kant Munjal of Hero Motors put it: "We can pay, but don't make us responsible for resettlement. That should be left to a government agency."[537] The industry also felt that there was a lack of clarity on the definition of urban and rural. Furthermore, they did not like the fact that the definition of affected families was way too broad.[538]

The business lobbies also issued statements against the 2013 Act, basically stating that this was not what they wanted. In a May 2014 press release, the business lobby FICCI (the Federation of Indian Chambers of Commerce and Industry) said: "Availability of land is a prerequisite for industrial development. However, the new Land Acquisition Act makes it virtually impossible to acquire land."[539]

The fact that businesses were unhappy was understandable, given that they had had an almost free run when it came to land acquisition until the Act was passed. Nevertheless, civil society groups and those towards the Left of Centre were also unhappy with the Act. The feeling was that the Act did not do enough for those who were affected by land acquisition. One reason offered was that those living off the land being acquired (i.e., tenants and labourers) were not being adequately compensated. After the land was acquired, these individuals would flood the local market and drive down the overall wages of labourers and workers. There could be other issues, like groundwater depletion, loss of access roads, loss of business for artisans, and so on. The problem is that trying to reach out to everyone who is impacted by land acquisition raises issues of identification as well as damage assessment.[540]

This was, and still remains, an important consideration in an economy like India, where the disguised unemployment is very high.

The other criticism from the Left was that, even though the 2013 land acquisition Act had the social consent clause, the states could always get around it by offering land to private companies out of the land banks that they had acquired. These land banks would not come under the consent clause for the simple reason that they were not explicitly acquired for private projects.[541]

Other than these issues, there are other serious problems with the Land Acquisition Act of 2013. Section 5(1) of the Act makes it clear that "no irrigated multi-cropped land shall be acquired under this Act". Section 5(2) of the Act points out that "such land may be acquired subject to the condition that it is being done under exceptional circumstances [and] as a demonstrable last resort". At the same time, not more than 5 per cent of the multi-cropped irrigated area in a district can be acquired. Furthermore, every time irrigated multi-cropped land is acquired, "an equivalent area of cultivatable [*sic*] wasteland shall be developed for agricultural purposes".[542] Linear projects are not subject to these clauses.

This has supposedly been done to protect the food security of the country. The trouble is that nearly one-third of the area is cultivated more than once during the course of the year. This is particularly true about the land near the major cities, where the demand for agricultural land is the highest. Anyone establishing a manufacturing plant would ideally want to establish it near a city, where the chances

of attracting skilled workers are the highest.

Take the case of Singur. There were other locations, like Kharagpur, that were also available. But a car plant would need skilled workers and engineers. As the Nobel Prize-winning economist Amartya Sen said in a 2007 interview: “It is… easier to attract engineers and managers to an industrial base near Calcutta for the Tatas than in Kharagpur.”[543] This is because nowhere in the world does a skill-intensive industry establish itself in rural areas, simply because the right kind of people are not available.

In fact, the locations of great industry in Britain, cities like Manchester and Lancashire, were built on very fertile land.[544] Given this, industry has always competed against agriculture. Also as Ghatak and Ghosh write: “This is particularly true in regions surrounding the major metros, where demand for agricultural land is the highest. The thinking behind such a proscription is difficult to understand, and its contradictions are similar to those of the public purpose clause. If the concern is that farmers might be given a raw deal, what matters is not whether the land grows one crop or three, but whether the compensation paid is enough to cover the value of the crop that would be lost. Since farmers in single-cropped regions are generally poorer and more economically vulnerable, the first egalitarian instinct should have been to erect a protective legal fence around their property instead of rushing to quarantine relatively prosperous multi-cropped land.”[545]

Believing that land acquisition for industry would lead to a shortage of food is an extremely alarmist view to have, and probably stems from the fifties and the sixties, when India did not produce enough to feed its citizens and, in the process, had to resort to imports.

But what was true then is not true now. In fact, India produces more rice and wheat than it requires. Data from the World Bank shows that 60.3 per cent of India’s land area is agricultural land. The bank defines agricultural land as the “share of land area that is arable, under permanent crops and under permanent pastures”.

Furthermore, India has the second largest agricultural land in the world. As the India Brand Equity Foundation, a trust established by the Ministry of Commerce and Industry, points out: “At 157.35 million hectares, India holds the second largest agricultural land globally.”

Only the United States has more agricultural land than India.

What this means is that India has enough land dedicated to agriculture, and even if some of it is taken away for other purposes, there will still be enough land left for agriculture.

****

An editor I worked with briefly while working for a personal finance newspaper was in love with solutions. His firm belief was that every article should have a solution because, otherwise, it left readers with a sense of incompleteness. And that wasn't really required.

If I were to go with the same logic, I should be able to offer solutions to India's land acquisition mess to ensure that you, dear reader, are not left with a sense of incompleteness. But I wish it were that straightforward. The basic problem with the land acquisition system, as it has evolved, is that the trust required to make sure that any system continues to work has completely broken down. And that is not going to be so easy to re-build.

The Land Acquisition Act of 1894 should have been done away with many years ago. In fact, with the benefit of hindsight, it is safe to say that India should have had a new land acquisition law after Independence. But the government of the day decided against it, and the Act was allowed to run for more than six decades after Independence.

The 1894 Act paid the landowner 130 per cent (since 1984; it was 115 per cent before that) of the market value of the land. And how was the market value calculated? It was determined on the basis of circle rates[xv] or the value of the sale deed of a similar property. In large parts of the country, circles rates have never been a true reflection of the market value of land. As Ramesh and Khan point out: "It was also acknowledged that land values are, on an average, a sixth of their represented or book value as drawn out in the circle rate[s]. As one moved away from urban centres, the disparity became more striking, with land records not having been updated for decades in some parts of the country."[546]

Over and above this, the value of the sale mentioned in the sale deeds is usually not the correct one, given that people are trying to save on the stamp duty they need to pay the state government. In fact, in many areas, the number of transactions was too few. And this

allowed (and still allows) the officials to manipulate the market price by selective sampling.[547]

Also, it is worth remembering that the government itself determined the value of land, and did not appoint any independent evaluators to carry out the same. This was primarily because India continued to use a pre-Independence land acquisition law. The British ruled India and did not see any need to appoint evaluators. They could take what they wanted to. The Indian governments after Independence continued with the same tradition.

In countries like Thailand, the land is valued by independent licensed evaluators. In India, with the government making the valuation decisions, an independent valuation process never really took off.[548] Furthermore, the system as it has evolved does not take a price input from the affected party, i.e., the landowners.[549]

This basically meant that even those who were paid for their land when the government acquired land under the doctrine of eminent domain did not get paid much. Also, since the 1990s, many such individuals saw governments acquiring their land and selling it to private companies, which made a killing in the process. Obviously, this led to the trust required for the system to function completely breaking down.

The 2013 land acquisition Act tries to correct this by offering landowners much more than simply the market price of their land. A multiple of two to four times of the market price and the value of the assets on the land being acquired needs to be paid by the government acquiring the land. The hope is that, with more money on offer, the opposition to land acquisition will go. This might be true, but it would lead to other problems. In fact, it already has.

As Chakravorty writes: “Any pricing system that is based on arbitrary multiplication of [the] ‘market price’ will severely constrain urban development…. The political problem of [the] resistance to land acquisition will go away—which is what the lawmakers want, no doubt—but an even bigger economic problem will be created.”[550] Also, no attempt has been made to arrive at a price for the land by getting those whose land is being acquired involved in the process.

One solution is proposed by Ghatak and Ghosh in their paper. Their proposal is a fairly straightforward one. The government should conduct an auction to buy land. It will buy land from the sellers who

offer the cheapest price. They explain this solution through the example of Singur, where the Tata Motors Nano factory was to be set up. They write:

> The proposed factory was to occupy approximately 1,000 acres. Demarcate an area which is twice the size (say) of the project site, i.e., 2,000 acres. This should include the project site itself (to be referred to as the core) and a belt of additional farmland surrounding it, amounting to another 1,000 acres (to be referred to as the periphery). All owners within this operational zone of 2,000 acres will be asked to submit tender bids for selling their land to the government. The 1,000 acres on which bids are the lowest will be procured against cash compensation.... The last step of the process is to take land from farmers in the core who have not sold for cash and compensate them with the plots of equal size procured in the periphery.

While this is not a perfect solution, it is better than what is currently being done. It is also fair, given that the farmers who do not want to sell out will be given farming land in the vicinity. At the same time, it allows the price discovery process to take place.

The slowness of land acquisition has an impact on infrastructure projects. Take the example of the Delhi-Mumbai Industrial Corridor (DMIC). The project has been moving at a very slow pace due to the slow pace of land acquisition. As Amitabh Kant, the then director of DMIC, said in June 2014: “While acquiring land in Aurangabad, land prices went up by 5.5 times the market rates simply because landowners were not willing to sell at a lower price.”

The hold-out problem, wherein farmers do not sell as they are looking for a better price, has only got worse since the passing of the 2013 Act. The government not being able to buy land for public infrastructure projects is not the best thing that could have happened to India. Chakravorty estimates that land prices in rural India after the passage of the 2013 Act will be between Rs. 16 lakh and Rs. 60 lakh per acre. At this price, just the purchase price alone would provide an income that is around eight to 12 times more than the money that is currently being made from the land. In urban areas, Chakravorty expects the price to be not less than Rs. 3 crore per acre anywhere. In metros, this would be even higher.

Given the price and other requirements of the 2013 land law, the purchase of land has come to a standstill. Over and above this, the farmer, who, typically, owns the land that is acquired, looks at it as an insurance, as collateral against which a loan can be taken, an inheritance for future generations, and also as a matter of status and

pride.[551] Hence, the farmer does not look at the land as just something he uses to earn a living. It is a lot more than that. Given this, acquiring a large tract of land is not easy. Things become even more difficult if land is required at a specific location.

This isn't good because any economic activity needs land. In fact, the state of Tamil Nadu has managed to get around the provisions of the 2013 Act. Tamil Nadu sought an exemption and received Presidential Assent to exempt three major categories from the 2013 land law. Land acquisition carried out under the Tamil Nadu Highways Act (2001), the Tamil Nadu Acquisition of Land for Industrial Purposes Act (1997), and the Tamil Nadu Acquisition of Land for Harijan Welfare Schemes Act (1978) will not come under the 2013 Act. This means that the consent clause and the social impact clause do not come into the picture there. Nearly 80 per cent of the land acquired by the Tamil Nadu government comes under these three Acts.[552]

It remains debatable whether this remains the best way to go about land acquisition. The Tamil Nadu model is more in line with the 1894 law, which the 2013 law replaced. This hasn't been adopted by other states, fortunately.

In December 2014, the Modi government promulgated an ordinance which tried to dilute the provisions of the 2013 land law, in order to get land acquisition going again. The irony was that the Bhartiya Janata Party had voted in favour of the 2013 land law.

In fact, when the 2013 Act was passed, a senior BJP leader had admitted that the party knew that the bill would have a disastrous impact on the economy, but then "compulsions of electoral politics is such that you can't be seen to be opposing any populist move".[553] This comment came after it took two governments six years to come up with a new land acquisition law. The process had started in 2007, and it took six years to come up with a legislation which satisfied all the stakeholders, which included the BJP.

The 2014 ordinance brought in the following changes to the 2013 land law:[554]

> a) The thirteen Acts under which land acquisition could be carried out without the provisions of the 2013 land law applying were brought under the provisions of the Act.

b) Land acquisition carried out for projects in several areas was exempted from taking the consent of the affected families as well as from carrying out the social impact assessment. These areas were: a) rural infrastructure; b) industrial corridors; c) affordable housing; d) defence and defence production; and e) social infrastructure projects, which included public-private partnerships.

c) The term 'private entity' replaced the term 'private company' in the Act, so as to include other forms of ownership, like partnership, proprietorship, non-governmental organisations, and so on.

d) The definition of 'public purpose' was widened to include private educational institutions and private hospitals as well.

e) The 2013 Act had laid down that, if the land taken for a project was unutilised for a period of five years, then it had to be returned to the original owners or be subsumed under the state government's land bank. The ordinance changed this to any period that was specified at the time of the setting up of the project.

The hope was that these changes would revive land acquisition across the country. But nothing of that sort happened, as the government failed to get the changes in the ordinance passed as a law.

Article 123 of the Constitution empowers the President to promulgate an ordinance if Parliament is not in session, provided he is convinced that the situation demands it. Furthermore, an ordinance is valid for up to six weeks from the date on which the next session of Parliament starts, after which it lapses. There is no upper limit to the number of times an ordinance can be re-promulgated. The land acquisition ordinance issued by the Modi government was re-promulgated thrice. It was valid until August 31, 2015, when it was allowed to lapse. No steps have been taken by the government on this since then.

Given this, land acquisition in India continues to remain in limbo. The one thing necessary to get it going again is to overcome the trust deficit that has got built into the system. A major thing that needs to be done in order to build trust is to have proper land titles in place. In order to do this, states need to follow what the Rajasthan government has done on this front.

Also, land records need to be computerised and made accessible at the lowest level. What this would do is make sure that any buyer can see the chain of transactions before buying, thus leading to a little more clarity on the title, which is currently missing.[555]

Furthermore, the Change in Land Usage regulations need to go. This would make the acquisition process a little easier than it currently is. But it would also mean that the rents that the state government politicians and bureaucrats can extract from those who need land will have to come down. Hence, this is easier said than done.

Voluntary exchange is at the heart of good economics. But does that mean that the government should get out of the process of land acquisition altogether? Other than the problem of small plots and the lack of clear titles, private companies in India can rarely be trusted to go about land acquisition in a fair way. We are at that stage of development where many private companies are essentially run by crony capitalists.

The mess that currently prevails won't be easy to sort out. The question remains as to where the land for the *Make in India* programme, which envisages turning India into a manufacturing powerhouse, will come from? In the short run, the state governments can use their land banks. But land from the land banks cannot last forever. The other solution is to cut down on Big Government.

Many loss-incurring central as well as state-level public sector enterprises have a lot of land at their disposal. These enterprises can be shut down, and the land that they have could be used for the *Make in India* programme. This could be a viable medium-term solution.

Of course, this would mean taking on the trade unions. No government till date has shown the gumption to do that. But if *Make in India* has to succeed, this risk needs to be taken. Whether it will or not, dear reader, your guess is as good as mine. Furthermore, it is worth remembering that the demand for land will continue to remain high on the edges of cities, and hence, land will have to be obtained mainly by displacing a large number of people. Given this, land acquisition will continue to remain a social problem, in addition to being an economic one.

[xv] Every area has a circle rate decided by the state government. The circle rate is the minimum value at which the actual transfer of property between seller and buyer should take place. Hence, the buyer of the property pays stamp duty to the state government at the circle rate.

9. BLACK MONEY—WE WON’T GET IT BACK

> The punitive incidence of taxation, both personal and corporate, has only provoked contempt for taxation laws…. These restraining factors should be eliminated without further delay.
>
> – JRD TATA, ADDRESSING A PRESS CONFERENCE ON MARCH 4, 1985[556]

Most Indians, like most individuals in any part of the world, do not read pink papers (i.e., newspapers which have news on business and the economy). But there is one coloured term in economics which almost every Indian is familiar with, and that is black money. At its simplest level, black money is essentially income that has been earned through legal or illegal means and on which taxes have not been paid.

The *White Paper on Black Money* released by the Ministry of Finance in May 2012 defines black money as "any income on which the taxes imposed by government or public authorities have not been paid". The wealth that has been accumulated in this way "may consist of income generated from legitimate activities or activities which are illegitimate *per se*, like smuggling, illicit trade in banned substances, counterfeit currency, arms trafficking, terrorism and corruption".[557]

Of course, this wealth that has been accumulated through tax evasion has "neither been reported to the public authorities at the time of their generation nor disclosed at any point of time during their possession".[558]

The question is: How is black money generated? At a simple level, black money is generated every time a citizen pays a bribe to get something done. In the eighties and the nineties, it meant something like paying small amounts to the local telephone linesman in order to ensure that the landline connection worked fine at all points of time.

In cities like Mumbai, it means paying a bribe to the local beat cop so that you can park in places where it is not allowed to park. An excellent example of this is on display at the Bandra-Kurla Complex in Mumbai, with many cars parked on the road despite the availability of a huge car park. The reason is straightforward: bribing the local beat cop turns out to be much cheaper than parking one's car at the car park for the day.

At a slightly higher level, it means paying a donation to the school where you want your child to be admitted, as anyone who has tried to admit a child to a so-called 'public school' in India is likely to admit. The donation culture is a part of higher education in India as well. Money changes hands when people pay bribes to get their children admitted to private engineering and medical colleges (more in medical colleges than in engineering colleges).

Then there was also the case of companies generating black money during the days of the licence raj as it existed during the 1970s and the 1980s. As Sanjaya Baru writes in *1991—How PV Narasimha Rao made History*: "One of the worst legacies of the licence-permit raj was to restrict firm and plant size. Joint secretaries in Udyog Bhavan [where the Ministry of Commerce and Industry is based in New Delhi] decided the capacity of firms, neither the market nor the technology…. This did not mean that every company adhered to government regulations. All it meant was that such restrictions encouraged corruption. Companies would operate at scales well beyond their authorised capacity and sell the excess output in [the] black market. Inspectors and taxmen would be bribed."[559]

Furthermore, it is common for landlords to demand rents in cash so that they don't have to pay any tax on it. A similar tactic is at play across many restaurants as well. It is clearly visible in Goa, where some of the most famous restaurants around the Bardez area do not accept payments through credit or debit cards. I guess no one wants to leave a trail and have to pay income tax on the money that they have earned.

Many service professionals, from doctors to chartered accountants, to lawyers, insist on being paid in cash. A few years ago, I used to occasionally accompany a friend who had a rare disease to a famous doctor in Mumbai. My friend typically used to be the last appointment for the day, and on more than a few occasions, I saw the assistant hand over a polyethylene bag to the doctor, which presumably had a huge amount of cash in it. This doctor, like most doctors, did not accept payment through a credit or debit card.

Of course there are many such examples at the individual, institutional and government levels. In fact, black money gets generated at the corporate level as well. In the recent past, this has come to the forefront, with many crony capitalists taking PSBs for a ride. The way this typically works is that a crony capitalist presents a

project proposal for which he wants the bank to lend money. The projected costs are heavily padded upwards and are shown to be much higher than they are in reality. As soon as the bank lends the money, the promoter starts siphoning it off. The money that is siphoned off is nothing but black money because the promoter won't be paying any tax on it, for sure. And when this money is put to use, more black money is generated.

Furthermore, builders and home-owners as well insist on a certain proportion of the price of a home being sold to be paid in black. Of course, this proportion tends to vary, depending on which part of the country one happens to be in. The proportion tends to peak in areas in and around Delhi (i.e., in the National Capital Territory). In many parts of the country, car parking lots typically get sold in all-cash deals.

Of course, when it comes to real estate, even home-owners selling homes insist on a certain part of the payment being made in black. If the deal is in the 70:30 ratio, then the buyer has to pay 70 per cent of the price of the home in white (i.e., through a cheque) and the remaining 30 per cent in cash, of which no account is kept.

In fact, black money in real estate continues to stay in real estate and helps in the creation of more black money. I realised this during the course of an interesting conversation I had with one of my relatives a few years ago.

This gentleman had bought a flat in the sub-city of Dwarka in New Delhi sometime in 2002 at a price of around Rs. 25 lakh. The area was totally undeveloped at that point of time, and hence, property had been going cheap.

More than a decade later, in 2013, the flat was worth something around Rs. 2 crore (the value has fallen since then). The flat had been bought as an investment. He planned to sell the flat and use the money to meet the expenses of his daughter's education as well as her wedding.

The balance that remained after meeting his daughter's expenses was to go into his retirement fund, given that he had no plans of working beyond the age of 63-64. During our conversation, I suggested to him that it would be a good idea to sell the flat and invest the money in different debt mutual funds, the logic being that Rs. 2 crore was more than enough to meet his daughter's education

and wedding expenses and, at the same time, add to his retirement kitty.

So it made sense to lock in on the gain and preserve the Rs. 2 crore that he had managed to accumulate by investing in the flat rather than look for more gains. Also, by investing in debt mutual funds, the returns that he would have earned would have been like a fixed deposit, but the after-tax returns would have been much better, given that he could have taken indexation into account while calculating and paying his taxes. Indexation essentially allows the cost of purchase of a flat to be adjusted for inflation while calculating capital gains.

The after-tax returns would have been in the range of 7-8 per cent, and he could have made a decent Rs. 14-16 lakh every year, which would have further compounded if he had stayed invested. He liked the idea, but immediately came up with a reason which essentially made the idea untenable.

The reason for that was very simple. Although he would have got offers from several buyers who would have been willing to buy the flat at Rs. 2 crore, none of them would have been willing to pay him the entire amount in white, i.e., by cheque. The buyers typically would have paid around half in cash and half by cheque.

As mentioned earlier, my relative had bought the flat at Rs. 25 lakh, most of which was financed through a home loan. The remaining came from the savings he and his wife had put together. So, all the money invested to buy the flat had been paid for in white. He had been lucky, given that the builder he had bought the flat from was building his first project and was more interested in offloading what he had built rather than insisting on being paid in black.

The property dealers my relative had been dealing with to sell the flat had clearly told him that if he wanted the entire Rs. 2 crore to be paid by cheque, then he could more or less forget about selling the flat. At best, they could get a buyer who would pay up to Rs. 1 crore in cheque; the remaining Rs. 1 crore would be paid in cash.

For someone who had largely led an honest life, he couldn't figure out how he would go around handling cash to the tune of Rs. 1 crore. The brokers had a solution for this as well. They could help him buy gold bars. Or, if he was willing to bet his money on real estate again, they could showcase some projects coming up on the outskirts of

Gurgaon in Haryana, or in Greater Noida in Uttar Pradesh.

Maybe he could buy two flats there, they suggested. And if he found all this too risky, he could simply store away the money in a couple of bank lockers. Even that could be arranged for, it was suggested.

My relative's situation is a very good example of all that is wrong with the Indian real estate system as it has evolved. Since a good proportion of the transactions are carried out in black, the cash that is thus generated needs to be put to use in some way. Just putting it away in a locker isn't really a solution.

Money needs to keep growing. The amount paid in black can also be used to buy more real estate. And this is how the cycle of black money in real estate continues. When a flat is sold, a proportion of the payment is made in black, which finds its way into real estate again (through the purchase of more flat/s).

The point is that if a real estate investor wants to sell his property, he has to be ready to receive at least a part of the payment in black. If he doesn't want to be paid in black, it will be very difficult for him to sell his property. Once he has sold the property and received the money, he needs to put the 'black' money to use again. This means buying more real estate in a cheaper location, where the prices are low. And so the cycle of black money continues, with investors selling to each other, driving up prices and making real estate unaffordable for those who want to buy a 'home' to live in.

In fact, not surprisingly, real estate remains the number one conduit for black money in the country. A report by the business lobby FICCI on black money, published in February 2015, points out: "The Real Estate sector in India constitutes… about 11 per cent of the GDP of the Indian Economy, as these transactions involve high transaction value. In the year 2012-13, the Real Estate sector [was] considered as the highest parking space for black money." [560]

****

There is no clear estimate of how much black money India has. Estimates range from around 20 per cent of the GDP to around 75 per cent of the GDP (as we shall see later in the chapter).

While there are no clear estimates of how much black money the country has, there is enough evidence going around to suggest that India has *a lot* of black money going around. A major reason for this is the high tax rates (another good example of Big Government) that prevailed in the country well into the 1990s. As we saw in Chapter 1, the great JRD Tata had to sell assets every year in order to pay income tax and wealth tax.

In fact, the highest marginal rate of income tax was at 97.5 per cent in 1970-1971. Given this, it is not surprising that many people who should have been paying income tax never got around to doing the same and, instead, hid their income in various ways.

Tax rates have fallen over the years, with the highest marginal rate of income tax being at 30 per cent for close to two decades now. But this hasn't led to the total amount of black money in the system coming down.

In 1991-1992, only 1.58 lakh Indians had an assessed income of more than Rs. 1 lakh. These individuals constituted around 3.5 per cent of the total number of individual taxpayers. These taxpayers paid around 40 per cent of the total income tax, at an average rate of 35 per cent.[561]

Interestingly, the population of India in 1991 was around 88.8 crore. Hence, 0.02 per cent of the country's population paid around 40 per cent of the total income tax collected from individuals. Have things changed since then? The trouble is that the Income Tax Department does not regularly release income tax data.

As the famous French economist Thomas Piketty said regarding this issue in the Indian context: "There is [an] extreme lack of transparency for data, especially income tax data…. It is very difficult to get data from [the] authorities." He further said that he did not understand why there wasn't any pressure on the government to make income tax data public.[562]

Nevertheless, in late April 2016, the government did release income tax data for the assessment year 2012-2013, i.e., for the income earned during 2011-2012. This data threw up many interesting data points, which tell us very clearly that there is a huge amount of black money within India. Let's take a look at a few points.

a) During the assessment year 2012-2013, around 2.88 crore

individuals filed income tax returns. The total income tax collected from these individuals amounted to Rs. 1,14,555 crore. The interesting thing, nonetheless, was that only 1.26 crore individuals paid any income tax. Data from the World Bank shows that, in 2011, the population of India was 124.7 crore. This means that, in the assessment year 2012-2013, only a little over 1 per cent of India's population paid income tax.

One explanation for this is straightforward, and that is that income from agriculture is untaxed. Close to 50 per cent of the country's population still depends on agriculture for a living. Furthermore, this also tells you that India is a poor country, where most people earn a taxable income of under Rs. 2.5 lakh per year, only above which one has to start paying income tax.

What this also tells us, among other things, is that a significant part of the Indian economy continues to operate in the 'black' zone. Hence, a tremendous amount of black money is generated, on which income tax does not get paid.

b)As we saw earlier, in 1991-1992, 1.58 lakh individuals, or 0.02 per cent of the population, had an assessed income of more than Rs. 1 lakh. How did things look two decades later? In 2011, India's population was around 124.7 crore. 0.02 per cent of this works out to around 2.49 lakh. Given the limitations of the way in which the data has been declared, obtaining an exact figure is impossible. Nevertheless, in the assessment year 2012-2013, around 2.89 lakh individuals declared an income of greater than Rs. 25 lakh. Hence, it is easy to see that things have improved since 1991-1992. Nevertheless, the proportion of the population that actually comes under the income tax system continues to remain insignificant.

c)Around 3.94 lakh individuals paid a tax of greater than Rs. 5 lakh. In total, they paid an income tax of Rs. 64,313 crore in the assessment year 2012-2013, which made up for around 56 per cent of the income tax paid by individuals.

Furthermore, around 13.9 lakh Indians paid an income tax of greater than Rs. 1.5 lakh for income earned in 2011-2012. In total, they paid an income tax of Rs. 91,109 crore. This made up for around 79.5 per cent of the total income tax paid by

individuals for the assessment year 2012-2013.

This means that around 0.11 per cent of India's population (13.9 lakh divided by 124.7 crore) paid around 80 per cent of the income tax paid by individuals in the assessment year 2012-2013. This is one data point that clearly tells you how few Indians actually pay income tax. It also tells us that, while the situation is better than what it was two decades ago, a lot still remains to be done to get more individuals to pay their personal income tax.

d)Only around 26 lakh Indians declared income from house property under the individual category. A total income of Rs. 29,927 crore was declared under this category.

Of these, around 6.06 lakh individuals showed a negative income from house property. These would primarily have in cluded people who would have taken on a home loan to buy a house and were repaying it. During the financial year 2011-2012, an interest of up to Rs. 1.5 lakh paid on a home loan, in the case of a self-occupied house, could have been deducted from the income while calculating the taxable income.

This means that an individual repaying a home loan on a self-occupied house could have shown a negative income of up to Rs. 1.5 lakh when it came to income from house property. This negative income could have been deducted from the income earned during the course of the year, and the taxable income could thus have been brought down.

Furthermore, the limit of Rs. 1.5 lakh applied only to self-occupied property, and not to other homes that a taxpayer could have chosen to buy by taking on a home loan. Any amount of interest paid on such home loans could have been claimed as a deduction as long as a 'notional rent' was added to the income.

Getting back to the point, there were only 6.06 lakh individuals in the assessment year 2012-2013 who had a negative income from house property. As I had said, these were people essentially repaying their home loans.

It is worth asking whether, during 2011-2012, India had less

than 6.06 lakh individuals living in self-occupied homes on which home loans were being repaid. Something just doesn't add up here. Honestly, this is bizarre! In 2011, the number of home loan accounts with banks had stood at 47.3 lakh. This went up to 47.8 lakh in 2012.[563]

The Reserve Bank of India (RBI) puts out the sectoral deployment of credit data for the scheduled commercial banks at the end of every month. During 2011-2012, scheduled commercial banks gave out home loans worth Rs. 41,907 crore. In 2012-2013, the average home loan financed by banks was Rs. 10 lakh. I couldn't find an average home loan number for 2011-2012, and hence, will have to work with this.[564]

Let's assume that, in 2011-2012, the average home loan financed was 10 per cent lower, at Rs. 9 lakh, than in comparison to 2012-2013. This essentially means that, in 2011-2012 alone, around 4.66 lakh homes (Rs. 41,907 crore divided by Rs. 9 lakh) were financed by scheduled commercial banks.

Over and above banks, housing finance companies also give out home loans. Hence, it is safe to say that, just in 2011-2012 alone, more than six lakh home loans would have been given out. Furthermore, the number of outstanding home loan accounts in the country in 2011-2012 would have been greater than 47-48 lakh when we take into account the home loans given by housing finance companies as well. Of that, only a figure of 6.06 lakh is visible in the income tax data. You should be able to see why I say that things don't add up here.

e)Also, 19.95 lakh people declared a positive income from house property in the assessment year 2012-2013. This is another extremely low number. This means that the number of individuals in India who were earning a rental income from their homes (real as well as notional) during that year was around 20 lakh. So there were only around 20 lakh landlords in the country, if the data from the Income Tax Department is to be believed. How is that possible?

> It is worth recounting here something that Akhilesh Tilotia writes in *The Making of India* which is based on the Census data: "India's households increased by 60 million [6

crore] to 247 million [24.7 crore] from 187 million [18.7 crore] between 2001-2011. Reflecting India's higher 'physical' savings, the number of houses went up by 81 million [8.1 crore] to 331 million [33.1 crore] from 250 million [25 crore]. The urban increase is telling: 38 million [3.8 crore] new houses for 24 million [2.4 crore] new households."[565]

This means that India had 331 million, or 33.1 crore, houses in 2011. Now compare this with the deduction that there are only around 20 lakh individuals earning a rental income from their homes. This comparison clearly tells us how low the 19.95 lakh figure really is.

There are two things that become clear here. One is that many individuals are just buying up homes as an investment and not putting it up for rent. Anshuman Magazine, Chairman and Managing Director of CBRE South Asia Pvt. Ltd., in a 2015 article, wrote that "around 1.2 crore completed houses" are "lying vacant across urban India".[566]

The fact that so many homes have been bought and are lying vacant is another manifestation of black money. A good proportion of black money finds its way into real estate, where it's perhaps easiest to hide it these days. Secondly, this is a clear indication of the fact that most landlords are getting their rents paid in cash and not paying any income tax on it. It also leads to the question: Where did these people earn the money to build/buy these houses in the first place?

Here is another interesting data point: Of the 19.95 lakh who had some rental income, around 14.55 lakh had an average rental income of around Rs. 60,000 per year, or Rs. 5,000 per month. This figure seems to be low and out of tune with the prevailing rents. People paying income tax primarily live in the big cities, and such a low rent in a big city is practically unheard of.

The point being that a major part of the black money in India continues to be generated in the real estate sector. The general impression we have had until now is that black money is generated when real estate is bought and sold. Nevertheless,

with this new data, it is very clear that black money is also generated even when real estate is rented out.

f)We can also use the data released by the Income Tax Department for the assessment year 2012-2013 to calculate the effective rate of individual income tax in India for that year. We all know that there are three income tax slabs for the taxation of individuals – 10 per cent, 20 per cent and 30 per cent – with a higher rate being applied as the income goes up. Nevertheless, precisely what proportion of income the government is actually able to collect as tax after all the deductions and exemptions are applied is an interesting question to answer.

Table 9.1: Effective rate of Income Tax for individuals for the assessment year 2012-2013.

Source of Income	Income (in Rs. crore)
Salary	6,27,200
House Property Income	29,927
Business Income	4,03,251
Long-Term Capital Gains	30,479
Short-Term Capital Gains	3,290
Income from Other Sources	1,28,020
Income from Interest	44,918
Total Income	12,67,085
Total Tax Collected	1,14,555
Effective Rate of Income Tax	9 per cent

Source: Income Tax Department, Income Tax Returns Statistics.

Take a look at Table 9.1. For the assessment year 2012-2013, individuals declared a total income of Rs. 12,67,085 crore. On this, an income tax of Rs. 1,14,555 crore was collected. This means an effective rate of 9 per cent. Hence, the effective rate of income tax was lower than even the lowest rate of tax, at 10 per cent. This is clearly a reason for the government to worry.

The effective rate of income tax was lower than even 10 per cent, given that there were enough deductions and exemptions available to taxpayers to bring down their taxable income. The revenue foregone by the government due to all the deductions

and exemptions on offer to income taxpayers in 2015-2016 had stood at around Rs. 55,367 crore, up from Rs. 49,206 crore a year earlier. The government foregoes a lot of revenue due to exemptions and deductions on offer on corporate income tax, excise duties and customs duties as well. These amounts are significantly more than the revenue that the government foregoes on individual income tax.

> Other than the government having to forego tax, all the deductions and exemptions make things complicated for even the income tax officers. As Arun Kumar writes in *The Black Economy in India*: "The tax laws are far too complex to be implemented meaningfully. No income tax officer can have the time to properly scrutinise the return submitted by even a small businessman or even a professional. Taking advantage of this, those who wish to evade income tax submit incorrect returns, and then bribe the officer to have them accepted."[567]

Kumar's book was published in 1999. Things have changed since then, and much of the income tax returns filing has now gone online. This basically means that any anomalies can be caught more quickly than was the case in the past. Also, in conversations I have had with chartered accountants, it has been suggested that, as more and more of the financial system goes digital, investing black money has become more difficult. Hence, we are moving in the right direction.

Nevertheless, no effort has been made to cut down Big Government in this area by simplifying the Income Tax Act of 1961 to the point where it is easy for the authorities to catch those fudging on their tax returns.

This can basically be done by doing away with various deductions and exemptions. At the same time, different forms of income should be treated in the same way, and hence, taxed in the same way. The original version of the Direct Taxes Code (2009) came close to achieving this. But given that it would have put most chartered accountants out of business and closed extra money-making opportunities for the officials of the Indian Revenue Service, not surprisingly, it never became a law.

g)If all this isn't enough, there is more evidence to the fact that there is a lot of black money in India. In the assessment year

2012-2013, around 2.88 crore Indians filed income tax returns. Of these, nearly 56.4 per cent, or 1.62 crore, did not pay any income tax. The rest, i.e., around 1.26 crore individuals, did pay income tax.

Of the 1.26 crore who paid income tax, nearly 1.11 crore individuals, or 89 per cent, paid an income tax of less than Rs. 1.5 lakh for the assessment year 2012-2013. In total, these individuals paid an income tax of Rs. 23,446 crore. This works out to an average of Rs. 21,069 per individual. Of course, the median tax paid would have been even lower than this.

Hence, 89 per cent of those who paid tax in India for the assessment year 2012-2013 paid an average income tax of just over Rs. 21,000 for the year. This means an average income tax of less than Rs. 2,000 per month.

This means that around 14 lakh Indians (13.9 lakh, to be precise) actually got around to paying a large proportion of the total income tax in 2012-2013. They paid around Rs. 91,109 crore of the total income tax. It is safe to say here that the average Indian does not pay income tax.

Now let's compare this to some consumption figures, in order to show that the number of Indians paying income tax is actually way too low. Take the case of car sales. In 2011-2012, around 25.34 lakh cars were sold.

What does this tell us? In a country where around 13.9 lakh individuals actually paid a large chunk of income tax, 25.34 lakh cars were sold during the course of the same year. In fact, the number of cars being sold has continued to be in the range of 23.4-25.6 lakh a year since then. This basically tells us that many people who are buying cars are not paying any income tax.

Furthermore, 30,000 luxury cars are sold in India every year. In 2014, both Audi and Mercedes sold more than 10,000 cars in India. A February 2015 report published by the business lobby FICCI makes a similar point. The report estimates that the number of dollar millionaires (i.e., with assets of Rs. 6 crore or more) in India in 2014 had stood at around 2.27 lakh, up from 2.14 lakh in 2013. But the number of taxpayers with a taxable income of more than a crore was less than 50,000.

When I first wrote about this in a regular column, readers came up with a wide range of explanations to justify why this was nowhere as surprising as I was making it out to be. Some said there were many Non-Resident Indians (NRIs) whose parents had cars. Some others talked about companies helping employees buy cars as a form of tax planning. Still some others said that the rich have more than one car and keep buying cars frequently. Or the fact that many luxury cars were bought in the name of businesses, and so on.[568]

While each of these explanations is valid on its own, on the whole, these reasons are not persuasive enough to explain the fact that, in a country where around 13.9 lakh individuals pay a bulk of the tax, nearly 25 lakh cars are sold every year.

One reason for this could be that those earning their income from agriculture, which is tax free, are buying cars. Again, the question is: Just how many cars can they actually buy every year? The other (and more likely) reason is that cars are being bought with money on which income tax has not been paid, i.e., cars are being bought with black money.

Also, if we look at the income distribution of the salaried individuals paying income tax, around 20.2 lakh people had declared incomes between Rs. 5.5 lakh and Rs. 9.5 lakh for the assessment year 2012-2013. But the total number of cars sold in 2011-2012 had stood at greater than 25 lakh. It is safe to say here that those buying cars are earning at least Rs. 5 lakh per annum. The question is: Who is buying these cars then?

In short, it is safe to come to the conclusion that a significant proportion of the cars is being bought by those who have black money. The good news is that it shouldn't be very difficult for the income tax authorities to figure out who these people are, given the information technology infrastructure that is available these days. Of course, it may not be feasible for them to go after each and every such individual.

The common impression is that all black money does not get counted while calculating the GDP, and hence, the official size of the Indian economy is lower than its real size. That is not totally correct. When an individual who has black money buys a car, or a consumer durable for that matter, using black

money, some part of it does get reflected in the GDP. Also, for a long period of time, black money has found its way into post office savings schemes as well as life insurance policies. The money thus invested has found its way into productive investments, the value added by which does get reflected in the GDP.

h)The Income Tax Department also provides detailed data on the income of individuals under the headings of salary, business income, other income, short-term capital gains, longterm capital gains and income from interest.

Take a look at the Table 9.2(a). This tells us that the average income of the individuals who filed an income tax return in 2012-2013 was around Rs. 4.40 lakh.

Table 9.2(a): Sources of income for individuals and total amounts earned under them during the assessment year 2012-2013.

Income Source	Total Amount (in Rs. crore)
Salary	6,27,200
House Property Income	29,927
Business Income	4,03,251
Long-Term Capital Gains	30,479
Short-Term Capital Gains	3290
Other Sources of Income	1,28,020
Interest Income	44,918
Total (in Rs. crore)	12,67,085
Total Number of Returns	2,87,66,266
Average Income	**Rs. 4,40,476**

Source: Income Tax Department, Income Tax Returns Statistics.

How do things look if we look at just the salaried class? Take a look at Table 9.2(b).

Table 9.2(b): Average income of the salaried class during the assessment year 2012-2013.

Total Salary (in Rs. crore)	6,27,200
Number of Returns Filed (Salaried Class)	1,16,76,493
Average Income	**Rs. 5,37,148**

Source: Income Tax Department, Income Tax Returns Statistics.

As can be seen from Table 9.2(b), around 1.17 crore income

tax returns were filed by the salaried class. The average income of the salaried class in India who filed income tax returns in 2012-2013 was Rs. 5.37 lakh. This is around 22 per cent more than the overall average income of the individuals who filed income tax returns that year.

It is important to understand here that most of the individuals who belonged to the salaried class during 2012-2013 would have had an income lower than the average income of Rs. 5.37 lakh. In order to understand this, we will have to take a look at the data in a little more detail.

Let's divide the data into two parts: those who earned up to Rs. 10 lakh and those who earned more than Rs. 10 lakh. Let's consider those who earned up to Rs. 10 lakh first. The total number of returns filed by the salaried class was around 1.17 crore. Of this, close to 1.06 crore had salaried incomes of up to Rs. 10 lakh. This means that around 91 per cent of the salaried class who filed income tax returns in 2012-2013 had an income of up to Rs. 10 lakh. Take a look at Table 9.3.

Table 9.3: Salary brackets of less than or equal to Rs. 10 lakh.

Salary (x) (in Rs. lakh)	Number of Returns	Total Salary Income (in Rs. crore)
$0 < x \leq 1.5$	16,00,167	14,956
$1.5 < x \leq 2$	10,67,300	18,853
$2 < x \leq 2.5$	10,24,315	23,120
$2.5 < x \leq 3.5$	19,18,714	57,075
$3.5 < x \leq 4$	8,06,685	30,215
$4 < x \leq 4.5$	7,54,202	32,048
$4.5 < x \leq 5$	6,96,210	33,032
$5 < x \leq 5.5$	5,95,298	31,190
$5.5 < x \leq 9.5$	20,23,583	1,40,464
$9.5 < x \leq 10$	1,00,155	9,760
Total	1,05,86,629	3,90,713
Average Income		**Rs. 3,69,063**

Source: Income Tax Department, Income Tax Returns Statistics.

The average income of those earning up to Rs. 10 lakh was Rs. 3.69 lakh. This is significantly lower than the overall average income of Rs. 5.37 lakh of the salaried class filing income tax returns. How do things look for those earning an

income of up to Rs. 5 lakh? Now take a look at Table 9.4.

The average income of those earning less than Rs. 5 lakh was around Rs. 2.66 lakh. These individuals formed more than two-thirds of the overall salaried class filing income tax returns in 2012-2013.

How do things look for those earning more than Rs. 10 lakh per year? The average income of those earning more than Rs. 10 lakh came out to around Rs. 21.7 lakh, which is significantly greater than the overall average of Rs. 5.37 lakh for the salaried class that year.

Table 9.4: Salary brackets of less than or equal to Rs. 5 lakh.

Salary (x) (in Rs. lakh)	Number of Returns	Total Salary Income (in Rs. crore)
$0 < x \leq 1.5$	16,00,167	14,956
$1.5 < x \leq 2$	10,67,300	18,853
$2 < x \leq 2.5$	10,24,315	23,120
$2.5 < x \leq 3.5$	19,18,714	57,075
$3.5 < x \leq 4$	8,06,685	30,215
$4 < x \leq 4.5$	7,54,202	32,048
$4.5 < x \leq 5$	6,96,210	33,032
Total	78,67,593	2,09,299
Average Income		**Rs. 2,66,027**

Source: Income Tax Department, Income Tax Returns Statistics.

What do these tables tell us? That the average salaried Indian who files income tax returns doesn't earn much. As mentioned earlier, around 91 per cent of the salaried class had an average income of Rs. 3.69 lakh. More than two-thirds had an average income of Rs. 2.66 lakh.

This basically means that the income of the average salaried Indian filing an income tax return is significantly lower than both the overall average salaried income as well as the overall average income. At least that is how things were for the assessment year 2012-2013.

A question worth asking here is: What sort of a home can an individual earning a salary of Rs. 3.69 lakh per year actually afford? An annual income of Rs. 3.69 lakh translates into a monthly income of around Rs. 30,755.

What sort of a home loan would a bank give against this amount? Typically, a bank works with the assumption that 40 per cent of the monthly income can go towards servicing an EMI and accordingly gives the loan.

In this case, that amounts to around Rs. 12,300. An EMI of Rs. 12,300 at an interest rate of 10 per cent per annum and a tenure of 20 years would service a home loan of Rs. 12.75 lakh. Banks typically lend up to 80 per cent of the official value of the property. This means an official value of property of around Rs. 16 lakh (Rs. 12.75 lakh divided by 80 per cent). Please note that I have used the word 'official', because there is bound to be a black component as well.

What this number tells us is that most of the salaried class in 2011-2012 were not in a position to buy a home to live in across large parts of the country. There is no reason to believe that things would have changed since then.

The point is that the demand for real estate is in the below Rs. 20 lakh market price segment. But what is being built across large parts of the country is clearly above that price. This has again happened because a lot of black money has found its way into real estate all across India and, in the process, driven up real estate prices beyond what most people can afford.

i)While the release of detailed income tax data is a good start, much more remains to be done. First and foremost, data from more years needs to be released. This means releasing data from prior to the assessment year 2012-2013. It also means releasing data from years after the assessment year 2012-2013. More data would help researchers spot trends over the years.[xvi] This has been a standard problem with Big Government over the years. It doesn't like sharing data with its citizens. And even if it does, it does it in a format which is not user-friendly at all.

Many ministries still scan and upload reports onto their websites. This means that the size of the files is simply too big to be downloaded on the slow internet connections that India has. The biggest such document that I have managed to download was a document from the Power Ministry's website. The size of the document was more than 100 MB.

The data on which all the above analysis is based was released by the Income Tax Department in the form of PDF files. While that is fine, data in the form of Excel files should also have been released. This makes the data machine-readable immediately and is of tremendous importance for researchers. Otherwise, a lot of time is uselessly spent in transferring data from the PDF files to an Excel file.

****

Black money has several negative effects. First and foremost, it leads to inequality. It shifts the burden of financing the government from those who can successfully evade taxes (read as businessmen, the self-employed, etc.) to those who cannot (read as salaried individuals, for whom income tax is deducted at source).

Other than leading to inequality, this has other effects as well. As Kumar puts it: "This makes the latter [i.e., those who cannot avoid paying income tax] feel that injustice is being done to them, and [so] they ask for greater concessions."[569]

And how has this played out in the Indian context? As mentioned earlier, in the assessment year 2012-2013, only around 2.88 crore individuals filed income tax returns. Of this number, around 1.62 crore did not pay any income tax. Only the remaining 1.26 crore individuals paid some amount of tax.

Of this number, around 1.11 crore paid a total amount of income tax of up to Rs. 1.5 lakh during the year. The average income tax paid by these individuals was at around Rs. 21,069. The interesting thing is that, even though the average income tax paid by these individuals was low, the total income tax paid added up to a substantial Rs. 23,446 crore. This was by far the highest amount paid by any category of taxpayers.

The next highest amount of tax was collected from individuals who paid income tax in the range of Rs. 5.5 lakh to Rs. 9.5 lakh. Around 1.79 lakh individuals fell in this category and paid a total income tax of Rs. 12,580 crore. The average income tax paid worked out to around Rs. 7 lakh. While, at an average level, this was substantially higher than the income tax paid by those paying tax of up to Rs. 1.5 lakh, on the whole it was lower.

What does this mean? This essentially means that, when it comes

to personal income tax, there is a fortune waiting for the government at the bottom of the pyramid. The phrase 'fortune at the bottom of the pyramid' was coined by the late management guru CK Prahalad in a book of the same name.

In this book, Prahalad looked at the distribution of wealth and the capacity to generate income in the form of an economic pyramid. As he wrote: "At the top of the pyramid are the wealthy, with numerous opportunities for generating high levels of income. More than 4 billion people live at the bottom of the pyramid on less than $2 per day."[570]

Prahalad's book was about these people, and he felt that the "dominant assumption is that the poor have no purchasing power and, therefore, do not represent a viable market". This, he believed, was incorrect, and he went on to show through various examples that even those earning less than $2 per day could add up to a substantial market size.[571]

Along similar lines, those paying an income tax of less than Rs. 1.5 lakh could also end up paying a substantial amount of income tax in total, even though the income tax that they individually pay is low.

Hence, there is a lot of money that the government can collect at the lower end as personal income tax. Of course, if it goes around simplifying the entire Income Tax Act as well as the entire process of filing income tax returns, that would help.

Having largely filed my own income tax returns for much of the last decade, I can safely say that the income tax returns forms are not user-friendly at all. Also, even the simplest income tax returns form (ITR 1-Sahaj) for the assessment year 2016-2017 has six worksheets built into the Excel sheet. Furthermore, some of the entries can confuse even someone adept at filing income tax returns.

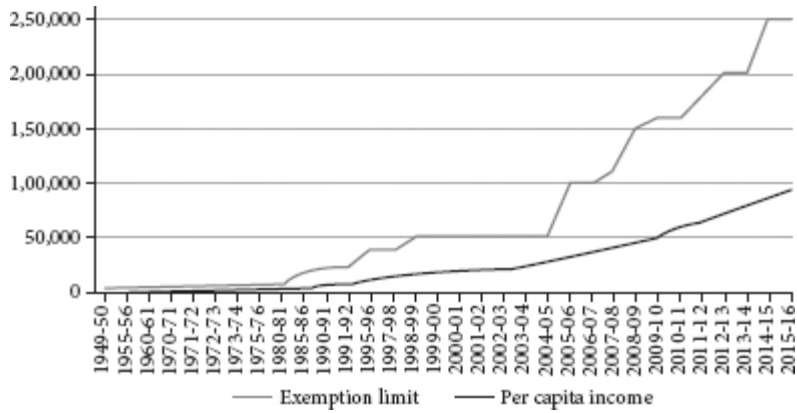
Getting back to the point, the fact is that there is a fortune that the government can make at the bottom of the income pyramid. In fact, this is a point that was made even in the Economic Survey of 2015-2016. Take a look at Figure 9.1.

What does this tell us? It shows very clearly that the basic tax exemption limit, only above which income tax has to be paid, has risen at a much faster rate than the per capita income in India. As the Survey points out: "We can calculate, in some sense, the 'missing taxpayers' in India—not those who are evading taxes altogether or

under-reporting taxes, but those who have legitimately gone under the tax radar due to 'generous' government policy."

So who are these missing taxpayers? These are those taxpayers who got left out because the basic exemption limit above which income tax has to be paid has been raised from the level of Rs. 1.5 lakh in 2008-2009. It currently stands at Rs. 2.5 lakh.

Figure 9.1: The basic exemption limit and per capita income (in rupees and at current prices) between 1949-1950 and 2015-2016.



Source: Economic Survey, 2015-2016.

If this threshold had not been raised as rapidly as it had, the government's income tax collections would have gone up tremendously.

As the Economic Survey points out:

> We ask how many taxpayers there would have been in 2012-13 if the threshold had been maintained at Rs. 1,50,000 (the threshold limit in 2008-09). We find that there would have been an additional 1.65 crore units incorporated within the taxation system (an addition of about 39.5 per cent) and tax revenues would have been about Rs. 31,500 crore greater. India's tax-GDP [ratio] would have increased by 0.32 per cent just by not having raised the threshold so generously.

In fact, the Survey also points out that there is a lot that India can learn from China on this front. As it points out:

> [The] Chinese success in bringing more citizens into the individual income tax net owes to [the] setting [of] a reasonable threshold for paying taxes and not changing it unduly. In contrast, in India, exemption thresholds for income taxes have been consistently raised. In fact, [as Figure 9.1] shows, thresholds have been raised much more rapidly than underlying income growth so that, today, the wedge between average income and the threshold has widened.

The finance ministers who increased the tax exemption limit knew what they were doing. They were basically playing to the gallery and

making the people who pay taxes feel better about the fact that they were paying taxes, by increasing the basic exemption limit at a faster pace than the increase in per capita income.

But the loss of taxes on this front was more than made up for, first through a higher service tax rate and now through various cesses like the Swachh Bharat Cess and the Krishi Kalyan Cess. Indirect tax is essentially a tax on goods as well as services and not income or profits. It is just that, since these taxes are indirect, people don't realise that they are paying them.

Even when they realise that they are paying these taxes, they don't keep track of the total amount of indirect tax they have paid during the course of the year. After all, what one doesn't know about doesn't really hurt. And given this, it is easier to increase the rates of indirect taxes than those of direct taxes.

Another good metric to track here is to look at the ratio of the basic exemption limit to the per capita income that prevailed at any point of time. Take a look at Table 9.5.

Table 9.5: The basic exemption limit over the years.

Year	Basic Exemption Limit	Per Capita Income*	Ratio
1961-1962	3,000	405	7.4
1971-1972	5,000	852	5.9
1981-1982	12,000	2,315	5.2
1991-1992	22,000	7,167	3.1
2001-2002	50,000	20,844	2.4
2002-2003	50,000	22,142	2.3
2003-2004	50,000	24,461	2
2004-2005	50,000	27,286	1.8
2005-2006	50,000	30,656	1.6
2006-2007	1,10,000	35,234	3.1
2007-2008	1,10,000	40,264	2.7
2008-2009	1,60,000	45,958	3.5
2009-2010	1,60,000	52,213	3.1
2010-2011	1,80,000	61,120	3
2011-2012	2,00,000	69,814	2.9
2012-2013	2,00,000	77,147	2.6
2013-2014	2,50,000	84,938	2.9

* Calculated using GDP at factor cost at current prices.

Source: A part of the exemption limit data has been taken from *Trend and Pattern of Personal Income Taxation in India*. Available at http://shodhganga.inflibnet.ac.in/bitstream/10603/855/9/09_chapter%203.pdf

In 1961-1962, an individual had to pay income tax only if his income was 7.4 times the basic exemption limit. What this did was that it left a large section of the population out of the tax bracket. As can be seen from Table 9.5, the ratio has come down over the years. In 2005-2006, it fell to an all-time low level of 1.6. The ratio started to rise again after that, and in 2013-2014, it stood at 2.9. (I haven't gone beyond 2013-2014 because, in January 2015, India moved to a new method of calculating the GDP, and the back series for that hadn't been generated at the time of writing this.)

What this tells us is that, to get more people into the tax bracket, a lower tax exemption limit is needed. This limit can be set at two times the per capita income to get a larger section of the population to start to pay taxes. Looking at the current per capita income, this limit could have been set at around Rs. 2 lakh. Furthermore, the government should mandate that those earning between Rs. 2 lakh and Rs. 2.5 lakh have to pay income tax at the rate of 5 per cent.

More than raising income tax for the government, this would bring more people under the tax bracket. This means that, as and when these individuals move to higher tax-paying brackets, they are likely to continue paying income tax, once they have been initiated into the process. Also, more people would get onto the digital bandwagon, with the need to get a Permanent Account Number, a bank account, etc.

While this might make sense theoretically, it would be politically difficult for the government to lower the basic exemption limit. This is something that has never happened before. The way around this is to not increase the current basic exemption limit of Rs. 2.5 lakh for at least the next five years.

This would ensure that, as inflation plays its part and incomes go up, more people would come under the tax bracket. Around 2020, the government can look at creating a new tax slab, starting at Rs. 2,50,000 and up to some basic level (depending on how the inflation pans out until then) with an income tax rate of 5 per cent.

In fact, as of early August 2016, 23.6 crore bank accounts had

been opened under the Jan Dhan Yojana. This means that more people have bank accounts now than in the past. Hence, in the years to come, more and more salaries will get paid into bank accounts. This means that taxing them will not be difficult.

Of course, as always, this means that the burden of financing the government will be more on the salaried class, which can't get away from paying their taxes, unlike others.

Also, at the cost of sounding repetitive, if the government wants to reap this fortune at the bottom of the pyramid, a simplification of the Income Tax Act is the need of the hour. In fact, the original Direct Taxes Code of 2009, which was to replace the Income Tax Act, fits the bill of a simpler tax law very well. But that is unlikely to happen, given that in October 2015, the Narendra Modi government set up a ten-member committee to overhaul the provisions of the Income Tax Act.[572]

****

As mentioned earlier, the evasion of taxes, leading to the generation of black money, has a negative impact on the economy on several fronts. As Ruchir Sharma writes in *The Rise and Fall of Nations*: "Researchers at the Organisation for Economic Cooperation and Development have found that countries with large black economies also tend to be the most unequal…. Jobs in the black economy are often poorly paid [and] with no benefits."[573]

Furthermore, those at the top who do not pay income tax become a sort of a role model for others. In the budget speech he made on February 28, 2013, the then Finance Minister, P Chidambaram, had said: "There are 42,800 persons – let me repeat, only 42,800 persons – who admitted to a taxable income exceeding Rs. 1 crore per year." This statement caused a lot of *hungama* at that point of time. In April 2016, the top Finance Ministry bureaucrat Hasmukh Adhia made a similar sort of statement when he said: "There are only 1.5 lakh individuals whose total income would be above Rs. 50 lakh."[574]

These low numbers obviously result in lower taxes for the government. They hurt in another way as well. As Sharma puts it: "Tax dodging at the top creates a strong disincentive for any citizen to pay up." And this perpetuates tax evasion.[575]

Furthermore, the income of those who evade tax goes up. But their consumption does not go up proportionately, given that they tend to save more of this black money. As Kumar writes in *The Black Economy in India*: "The tax evaders, who only spend a small amount of their income in increased consumption, save most of it and end up reducing demand in the system. In the net, demand does not go up, so that incomes remain unchanged in spite of tax evasion. So, even though the individual feels that she/he has a higher income due to evasion, businessmen as a class have less income."

A lot of the black money makes its way into real estate and gold. Why is real estate the ideal conduit for channelising black money? As Kumar writes: "The reason is that it is hard to value it. Hence, in a property transaction, if a certain value is declared by the buyer/seller, it is tough for anyone to prove that the price paid was different."[576]

In a country like India, home building is not a bad thing. The construction of homes has linkages to 250 other industries.[577] As Keith Wardrip, Laura Williams and Suzanne Hague write in a research paper titled 'The Role of Affordable Housing in Creating Jobs and Stimulating Local Economic Development: A Review of the Literature':

> During the construction of affordable housing — or any kind of housing, for that matter — the local economy benefits directly from the funds spent on materials, labour, and the like. If the builder is purchasing windows and doors from a local supplier, the supplier may have to spend money on materials and hire additional help to complete the order – examples of indirect effects. Finally, the construction workers, glass cutters and landscapers are likely to spend a portion of their wages at the local grocery store or shopping mall, which illustrates induced effects.

The trouble, though, is that much of the housing that has been built in India is lying unoccupied. As mentioned earlier in the chapter, more than a crore homes are lying unoccupied across the big cities in India. Despite this, the rental yield in India is between 2-3 per cent. Now, imagine if these homes were available for renting. The rents would have crashed even further.

Actually, even lower rents can be achieved by reforming the rental laws in the country, which are currently totally loaded against the landlords. This has led to a situation wherein people buy homes and keep them locked. If these homes were easily available for renting, the demand for owning homes would fall, because renting a home would become an even more attractive option.

Once the idea of easily renting a home becomes an attractive

option, the fascination for owning a home will come down. Once this fascination comes down, the demand for homes will come down. Once demand for owning homes (i.e., real estate) comes down, its viability as a conduit for black money would also come down.

Also, currently, a lot of the black money (or even the white money, for that matter) that goes into real estate ends up as dead capital once the landlord decides to keep the home locked. Furthermore, as Sharma writes: "A house will provide a home to one family but will not provide a steady boost to economic output or increase productivity."

The point being that the money that goes towards buying a home in which no one lives could easily instead have gone towards something else where it could have been put to better use.

On a similar note, the black money that goes into gold also hurts the Indian economy. It needs to be mentioned here that India produces very little gold of its own (in fact, almost next to nothing). Thus, gold needs to be imported. When gold is imported, foreign exchange gets used up. When the demand for gold is particularly high, the demand for dollars, which are used to buy the gold, also goes up. Importers of gold essentially sell rupees to buy dollars. In this process, the value of the rupee depreciates against the dollar.

A weaker rupee then pushes up India's oil bill, given that India imports 80 per cent of the oil it consumes. Over and above this, the government subsidises products like kerosene and cooking gas. In fact, it earlier used to subsidise diesel as well.

A weaker rupee means that the oil-marketing companies which buy oil need more rupees to buy the dollars necessary to buy oil. This means that the cost at which they buy oil goes up. Hence, they need to sell oil products at a higher price in order to ensure that they make a profit. But the government doesn't allow them to sell kerosene and cooking gas (and even diesel in the past) at a price at which they would make a profit.

Hence, every time the oil-marketing companies sell kerosene and cooking gas, they suffer an under-recovery. The government then pays the oil-marketing companies for these under-recoveries. Hence, the government subsidy on oil products goes up. This means higher expenditure for the government. Furthermore, it means a higher fiscal deficit as well. Fiscal deficit is the difference between what a government earns and what it spends.

A higher fiscal deficit means higher borrowing to meet the expenditure. And higher government borrowing ultimately leads to higher interest rates. A situation like this played out in 2013-2014. Of course, not all of it could be attributed to Indians with black money buying gold. Lastly, money that ends up in gold is essentially dead capital.

Interestingly, the law of the land is so structured that it is not very difficult to divert black money into gold. Until December 2015, a PAN (Permanent Account Number) card was mandatory for the purchase of gold worth only above Rs. 5 lakh. In January 2016, this limit was lowered to Rs. 2 lakh. This led to jewellers across the country going on strike. The logic offered by one jeweller was: "In our opinion, more than 80 per cent of the population doesn't have PAN cards." And what was the point in coming up with a legislation that impacted a large part of the population, he further asked.[578]

This is actually no logic at all. If a person can buy gold worth Rs. 2 lakh or more, he can surely get himself a PAN card. Now compare this with investing in a mutual fund, where a PAN card is mandatory, unless an investor is investing less than Rs. 50,000 in a year. This does not mean that no identification proof needs to be submitted. If the individual does not submit a copy of his PAN card, he needs to offer a copy of his Voter ID card, or driver's licence, or passport, etc. as a proof of his identity. All this is not required when you are buying gold.

Getting back to the issue of tax evasion, for every rupee, dollar or pound that is not paid as tax in its country and yet makes its way to tax havens, or even stays within the country, the government of that country earns lower taxes to that extent. If the government wants to maintain its level of expenditure, it has few options. One is to raise taxes to earn that extra revenue necessary to maintain expenditure. This means that those paying their taxes honestly would get taxed at a higher rate. And that is clearly not a good thing.

Another option in order to maintain the expenditure is to end up running a higher fiscal deficit. Of course, a higher fiscal deficit means that the government has to borrow more. In the process, the government crowds out the private borrowers, because lending to the government is deemed to be the safest form of lending in most financial markets.

There is only so much money going around to borrow from. With the government borrowing more, the private borrowers (like banks and other financial firms) have to offer a higher rate of interest to be able to borrow. This pushes up interest rates all through the economy. In fact, it also leads to financial repression, wherein the government forces banks, provident funds, pension funds and other financial institutions to compulsorily buy government bonds. Government bonds are essentially bonds sold by a government to raise money in order to finance its fiscal deficit.

This financial repression essentially helps the government maintain a lower rate of interest for its borrowing. This is particularly true for India and was pointed out by the *Report of the Expert Committee to Revise and Strengthen the Monetary Policy Framework* (better known as the Urjit Patel Committee), released in January 2014: "Large government market borrowing has been supported by regulatory prescriptions under which most financial institutions in India, including banks, are statutorily required to invest a certain portion of their specified liabilities in government securities and/or maintain a statutory liquidity ratio (SLR)."

This statutory requirement essentially ensures that there is a constant demand for government bonds. This helps the government get away by offering a lower rate of interest on its bonds. "*The SLR prescription provides a captive* [emphasis original] market for government securities and helps to artificially suppress the cost of borrowing for the Government, dampening the transmission of interest rate changes across the term structure," the Expert Committee report pointed out.

The Committee uses the word 'captive' primarily because banks are forced to invest a certain proportion of their deposits in government bonds. This money then finances the fiscal deficit of the government.

****

The popular view is that Switzerland is the centre of global black money. While this is true, the situation is a little more complicated than that. The conventional view of Switzerland is best explained by a line from Orson Welles' film *The Third Man*: "In Italy, for 30 years under the Borgias, they had warfare, terror, murder and bloodshed; but they produced Michelangelo, Leonardo da Vinci and the Renaissance. In Switzerland they had brotherly love; they had 500

years of democracy and peace, and what did that produce? The cuckoo clock."

But there is a lot more to Switzerland than just global black money. As the Cambridge University economist Ha-Joon Chang writes in *Bad Samaritans—The Guilty Secrets of Rich Nations and the Threat to Global Prosperity*: "Switzerland is *not* [emphasis original] a country living off black money deposited in its secretive banks and gullible tourists buying tacky souvenirs like cow bells and cuckoo clocks. It is, in fact, literally the most industrialised country in the world."[579]

Data released by the Swiss National Bank suggests that the Indian money in Swiss banks was at around Rs. 14,000 crore in 2013. In 2006, the total amount had stood at Rs. 41,000 crore. The reason for this fall is simple. Over the past few years, as black money and Switzerland have come into focus, it would have been stupid for individuals or companies sending black money out of India to keep sending it to Switzerland.

What further needs to be realised is that there are around 70 tax havens all around the world. An estimate made by Philip R Lane and Gian Maria Milesi-Ferretti in a 2010 International Monetary Fund working paper suggests that over $18 trillion of wealth lies in small international financial centres other than Switzerland and beyond the reach of any tax authorities. Even this is "most likely an underestimate, in light of the severe data problems", the authors feel.[580]

An estimate made by *The Economist* in 2013 suggested that: "Nobody really knows how much money is stashed away: estimates vary from way below to way above $20 trillion."[581]

Getting back to India, a question worth asking is: Just how much black money has left Indian shores? An estimate made by the Washington-based research and advocacy group Global Financial Integrity in reports published in December 2014 and December 2015 suggests that the total amount of black money that had left India between 2003 and 2013 stood at $520.5 billion (see Table 9.6). Of course, this is much more than the Swiss claim to have.

Also, this estimate does not take into account *hawala* transactions and the misinvoicing of trade. As the report points out: "Many illicit transactions occur in cash to prevent an incriminating paper trail. For

these many reasons, our estimates are likely very conservative."[582] Even with these weaknesses, there is no denying that a substantial amount of money seems to have escaped Indian shores between 2003 and 2013. And there is no reason to suggest that this process wouldn't have continued in the years that followed.

The outflow peaked in 2012, when it reached $92.9 billion. In 2013, the number had stood at $83 billion, which was around 9.7 per cent lower than the previous year.

Table 9.6: Black money leaving India between 2003 and 2013.

Year	Amount (in $ billion)
2003	10.2
2004	19.5
2005	20.3
2006	27.8
2007	34.5
2008	47.2
2009	29.2
2010	70.3
2011	85.6
2012	92.9
2013	83
Total	**520.5**

Source: Global Financial Integrity.

The interesting thing, nonetheless, is that the quantum of money leaving India had increased dramatically during the Congress-led United Progressive Alliance (UPA) years. In 2003, around $10.2 billion left the country. This almost doubled by the next year. By 2012, it had jumped, by around 9 times, to $92.9 billion. In 2013, it was a little lower, at $83 billion.

Interestingly, the figure in 2009 was at $29.2 billion. This clearly tells us that the second term of the Congress-led UPA government, which started in May 2009, was fairly corrupt, leading to a lot of black money leaving Indian shores.

India is not the only country facing this problem. In fact, when it comes to the total amount of black money leaving a country, India is fourth in the list, behind China, the Russian Federation and Mexico. On this front, India has rapidly caught up with Mexico over the years.

The outflow of black money from Mexico between 2004 and 2013 had stood at $528.4 billion, just a little more than that from India.

Also, the amount of money leaving China in 2013 was 3.2 times in comparison to 2004. In the case of the Russian Federation, in 2013, the amount of money leaving was 2.6 times, whereas in the case of Mexico, it was 2.3 times. Between 2004 and 2013, the jump in the Indian case was around 4.3 times, which was clearly the most.

This money has found its way into tax havens all across the world, including Switzerland. As Gabriel Zucman writes in *The Hidden Wealth of Nations—The Scourge of Tax Havens*: "There has, in fact, never been as much wealth in tax havens as today. On a global scale, 8 per cent of the financial wealth of households is held in tax havens. According to the latest available information, in the spring of 2015, foreign wealth held in Switzerland reached $2.3 trillion."[583]

The money held in Swiss banks is almost equal to India's GDP. In fact, since April 2009, the money held in Swiss banks has increased by 18 per cent. The increase across all tax havens all over the world has been 25 per cent.

Interestingly, the Swiss have been smart about the black money coming into Switzerland. With all this money coming into Switzerland, the Swiss franc should have appreciated against other currencies. An appreciation of the Swiss franc would have hurt the overall Swiss economy, given that it is dependent on exports. An appreciating currency makes exports non-competitive against exports from countries whose currencies are not appreciating.

In order to avoid getting into such a scenario, the Swiss central bank, several times in the 1970s, imposed negative nominal interest rates on deposits in Swiss francs held by non-residents. This basically meant that the depositors had to pay the bank to keep their money. The message was clear: We are fine with things, as long as you hold non-Swiss assets.[584] But the moment you want to hold money in our currency, you will have to pay us for doing so. This essentially ensured that the Swiss franc did not appreciate, as all the black money coming into Switzerland over the years came in currencies other than the Swiss franc. Hence, Swiss exports continued to remain viable.

In September 2015, the United Nations set out the Sustainable Development Goals. Goal 16.4 points out that countries will "by 2030, significantly reduce illicit financial and arms flows, strengthen the

recovery and return of stolen assets and combat all forms of organised crime".

The phrase 'illicit financial flows' essentially refers to what we call black money in India. The Modi government has also on and off talked about getting back the black money that has left India.

In the run-up to the 2014 Lok Sabha elections, Narendra Modi had been very vocal about getting the black money that had escaped Indian shores back to India. This focus continued even after he took over as Prime Minister of the country on 26 May 2014. Though, two years later, there is little or nothing to show for any effort that may have been put in to get this black money back, despite a lot of noise being made.

The question to ask is: How feasible is this?

Given that a large amount of black money has left India, the Modi government's interest in getting this money back seems justified. While things may always be possible, what we need to look at is whether they are probable (or should I say feasible?).

One argument made against trying to get the black money back has been that there are way too many tax havens all around the world. There are around 70 tax havens all over the world, and the black money that has left the shores of this country could be stashed away almost anywhere.

Zucman estimates that around 8 per cent of the global financial wealth, or $7.6 trillion, is held in tax havens. His estimate is significantly lower than the other estimates stated earlier. But each of these estimates is a huge number, and that is what matters the most. Also, it is worth mentioning here that Zucman's estimate does not take into account non-financial wealth in tax havens. Non-financial assets include gold, yachts registered in places like the Cayman Islands, and works of art as well as jewellery.[585]

Getting back to the point I was discussing: How good are the chances of India and other countries getting this money back? While Switzerland was the original tax haven to which people who did not want to pay tax in their home countries took their money, things have changed since the 1980s. New tax havens, like Singapore, the Bahamas, Luxembourg, Hong Kong, etc., have emerged over the years.

As Zucman writes: “In all these tax havens, private bankers do the same things as in Geneva: they hold stock and bond portfolios for their foreign customers, collect dividends and interest, provide investment advice as well as other services…. And, thanks to the limited forms of cooperation with foreign tax authorities, they all offer the same service that is in high demand: the possibility of not paying any taxes on dividends, interest, capital gains, wealth, or inheritances.”[586]

As mentioned earlier, the Swiss banks, as of the spring of 2015, had foreign wealth worth $2.3 trillion (of course not all of it was black money). Of this, around $1.3 trillion belonged to Europeans. Given Zucman’s estimate of $7.6 trillion, a lot of black money emanating from all over the world has found its way into tax havens other than Switzerland.

How different are these tax havens from Switzerland? As Zucman writes: “To view Swiss banks in opposition to the new banking centres [i.e., tax havens] in Asia and the Caribbean doesn’t make much sense. A large number of the banks domiciled in Singapore or in the Cayman Islands are nothing but branches of Swiss establishments that have opened there to attract new customers.” Furthermore, this has also happened in order to make the most advantageous use of the tax laws of these places.

And this is one of the well-kept secrets of the various international tax havens—Switzerland is still at the heart of it all. As Zucman writes:[587]

> In the past, Swiss bankers provided all services: carrying out the investment strategy, keeping securities under custody, hiding the true identity of owners by the way of famous numbered accounts. Today, only securities custody really remains in their purview. The rest has been moved offsite to other tax havens—Luxembourg, the Virgin Islands, or Panama—all of which function in symbiosis. This is the great organisation of international wealth management.

Given this, India alone cannot deal with the issue. Combined international pressure needs to be applied on Switzerland in order to get anywhere with the idea of bringing black money that has left the shores of the country back.

Given that there are so many tax havens, the money that has left Indian shores could be anywhere. Tax havens maintain secrecy in order to ensure that they remain attractive options for those who are looking to hide their black money. Hence, recovery will continue to

remain difficult.

As Pooja Rangaprasad of the Centre for Budget and Governance Accountability (CBGA) writes in an article titled 'Issues Related to Black Money': "Individuals and corporations... set up a layer of *benami* trusts... using this network of tax havens and loopholes in domestic laws."[588]

In fact, more than 60 per cent of the accounts in Switzerland are held "through intermediaries of shell companies headquartered in the British Virgin Islands, or foundations domiciled in Liechtenstein". As Zucman writes: "Even if Switzerland has lost its hegemony… it's important to understand that it remains the heart of the machine… because the entire chain starts at its banks."

Despite this, even with Swiss cooperation, it might not be easy for the government authorities to figure out who the ultimate beneficiary is. And figuring this out would require massive international coordination and cooperation. Hence, the chances of getting back the black money that has left the shores of the country remain low. This point becomes even clearer by the fact that nearly $1.5 trillion of the mutual fund investments domiciled in Luxembourg have no identifiable owners.[589]

Zucman talks about imposing trade tariffs on Switzerland along with the maintenance of an international financial register. This, he feels, would "deal a fatal blow to financial secrecy". The irony is that Switzerland does not make much money in the process. Swiss banking services, which help people from all over the world to evade tax, do not contribute much to the GDP. The tax evasion brings in around €15 billion every year, or a little over 3 per cent of the Swiss GDP. Hence, unlike many other tax havens, Switzerland does not survive on all the black money from large parts of the world that is hoarded through its banks. So, even if the Swiss were to stop offering these services, it wouldn't make a huge difference to their GDP.[590]

****

One school of thought is: If the United States can work towards getting its black money back, then why can't India? The Indian Act called the Black Money (Undisclosed Foreign Income and Assets) and Imposition of Tax Act, 2015 (popularly known as the foreign black money Act) is inspired by the Foreign Account Tax Compliance Act (FATCA) of the United States. This FATCA of the United States was

passed in 2010 and was brought in after it was revealed that Swiss banks were helping American citizens hide their earnings.

As per the Act, American taxpayers are required to file a new form (Form 8938) declaring their foreign financial assets with a value greater than $50,000. This form needs to be filled up along with the annual tax return. If the taxpayer does not file Form 8938, he could face a fine of $10,000, which could go up to $50,000 for subsequent offences. Any taxpayer who pays lower tax because he does not disclose foreign financial assets could be subject to a penalty of 40 per cent.

As per FATCA, every financial institution outside the United States needs to figure out whether it has American citizens as clients. Having done that, it needs to report the information to the Internal Revenue Service of the United States, along with what that person holds in that account and the income earned on it. This exchange of data has to be done every year.

FATCA has been criticised on two grounds. One, it is seen as an invasion of privacy. And two, there is no *quid pro quo*, i.e., while the IRS of the Unites States is collecting data from foreign financial institutions regarding assets held by Americans, at the same time, it's not handing over data regarding assets held by foreigners in American banks and financial institutions.[591]

Nevertheless, the conventional view that people seem to have is that tax havens are now cooperating with the United States and handing over information regarding their clients. Hence, the question is: If the United States can do it, why can't India? And the answer lies in the fact that the United States is a global superpower. In 2013, the military expenditure of the United States amounted to $640 billion. This was nearly 36.5 per cent of the global military expenditure of $1.75 trillion. In comparison, the total budget for the Indian defence services in 2015-2016 was around $44 billion (at $1 = Rs. 67).

With so much money being spent by its government, the military apparatus of the United States can drop bombs anywhere in the world at a few hours' notice. As David Graeber writes in *Debt: The First 5000 Years*: "The U.S. Military ... maintains a doctrine of global power projection: that it should have the ability, through roughly 800 overseas military bases, to intervene with deadly force absolutely anywhere on the planet."[592] It is this military might of the United

States, and nothing else, that has led to the tax havens cooperating with it.

Nevertheless, as the Americans like saying, 'Show me the money'. Or, to put it simply, how much money has the Internal Revenue Service of the United States managed to collect because of FATCA? Jane G Gravelle, writing in a research paper titled 'Tax Havens: International Tax Avoidance and Evasion' for the Congressional Research Service, estimates that FATCA is expected to collect "$8.7 billion over 10 years, when compared with [the] estimated costs of international evasion of around $40 billion a year."[593] So, on an average, the United States expects to recover $870 million per year ($8.7 billion divided by 10 years) through FATCA when the international tax evasion by Americans is around $40 billion per year. Hence, the projected recovery rate for FATCA is a measly 2.2 per cent, on an average.

What this clearly tells us is that even the United States does not expect much out of FATCA, at least not initially. This despite being the only global superpower. In this scenario, how much chance do you think India has of recovering the black money that has left its shores?

****

The black money that leaves India does not keep sitting idle in savings accounts that earn almost no interest these days across large parts of the world. The money is invested in stocks, bonds and mutual funds, like the money on which taxes have been paid. Globally, the returns on this investment were around 5 per cent per year over the past 15 years. It was around 6 per cent between 1980-1990.[594]

A return of 5-6 per cent might sound low to an Indian, but when looked at from the point of view of the fact that, during the same period, developed countries have seen low inflation, this is not bad at all. Also, post-2008, after the financial crisis had broken out, the interest rates in large parts of the developed world have anyway been very low. Once this is taken into account, an average return of 5-6 per cent isn't really that bad. Plus, it is worth being reminded here that this is money on which tax has not been paid.

Furthermore, it is difficult for government authorities to track down the ultimate owner of such an investment. Let's try and understand this through an example. Take the case of a British individual holding Google shares in his Swiss bank account. The

American authorities can see that a foreigner has an investment in Google. Hence, it is a liability for the United States. The Swiss authorities see that some Google stock has been deposited with them. At the same time, they know that the stock belongs to a resident of the United Kingdom. Hence, it is neither an asset nor a liability to the Swiss. The British authorities should record the stock as an asset, but they don't, simply because they don't know that the British resident has an investment in Google.[595]

What makes the situation even more difficult in the Indian case is the fact that a lot of black money that goes abroad comes back to India through a process known as round-tripping. In fact, the Finance Ministry's *White Paper on Black Money* makes this point in the context of foreign direct investment:[596]

> The two topmost sources of the cumulative inflows from April 2000 to March 2011 are Mauritius (41.8 per cent) and Singapore (9.2 per cent). Mauritius and Singapore, with their small economies, cannot be the sources of such huge investments, and it is apparent that the investments are routed through these jurisdictions for [the] avoidance of taxes and/or for concealing the identities from the revenue authorities of the ultimate investors, many of whom could actually be Indian residents, who have invested in their own companies, though a process known as round-tripping.

A similar sort of round-tripping also happens in the stock market through an instrument known as Participatory Notes (PNs). As the *White Paper* points out:[597]

> Investment in the Indian Stock Market through PNs is another way in which the black money generated by Indians is re-invested in India. PNs, or Overseas Derivative Instruments (ODIs), are issued by FIIs [i.e., Foreign Institutional Investors] against underlying Indian securities, which can be equity, debt, derivatives, or even indices. The investor in PNs does not hold the Indian securities in her/his own name. These are legally held by the FIIs, but she/he derives economic benefits from fluctuation in prices of the Indian securities, as also dividends and capital gains, through specifically designed contracts.

This makes the issue of trying to recover the black money that has left Indian shores even more complicated. Nevertheless, this did not stop the Narendra Modi government from coming up with the foreign black money Act, which was passed by Parliament in May 2015.

The Act states that undisclosed foreign income as well as assets will be taxed at the rate of 30 per cent without allowing for any exemptions or deductions which are allowed under the Income Tax Act of 1961. This will be accompanied by a penalty equal to three times the amount of the tax. Hence, the tax and penalty on undisclosed overseas income as well as assets can amount to as much

as 120 per cent (30 per cent + 90 per cent). Furthermore, the amount of tax to be paid on foreign assets will be computed on the basis of its current market price and not the price at which it was bought.

Nevertheless, there was a way out of this. The foreign black money Act came into effect from June 1, 2015. The government offered a short compliance window, of until September 30, 2015, which would allow those with undisclosed foreign assets and income to declare them, pay a tax of 30 per cent and a penalty of 30 per cent. The Act also has a provision which allows the government to charge a penalty of Rs. 10 lakh for the inaccurate disclosure of foreign assets, along with a rigorous imprisonment of six months to seven years the first time around. Second and subsequent offences are punishable with fines of Rs. 25 lakh to Rs. 1 crore and a rigorous imprisonment of three to 10 years.

On the face of it, the Act seemed like an honest attempt to crack down on the black money that had already left the country and that might leave the country in the days to come. But there are several questions that crop up here. Why was a short compliance window being offered? It makes the taxpayers who have been honestly declaring their income (foreign and domestic) as well as assets till date look a tad stupid. Just because someone is willing to pay a fine of 30 per cent and declare his foreign assets, does that make him less guilty? Or is this another tax amnesty scheme in disguise being offered by the government?

Taking advantage of the compliance window, 638 declarants declared assets and income of Rs. 4,147 crore in total. This meant that the government was able to collect around Rs. 2,488 crore (60 per cent of Rs. 4,147 crore) as tax revenues. Thus, around Rs. 3.9 crore of tax and penalty was collected on an average from each declarant.

For all the hype and hoopla that has surrounded black money since Narendra Modi came to power, this is peanuts. And given this, a collection of Rs. 2,488 crore is basically a bad joke, especially once you take into account the tremendous amount of political capital that the Narendra Modi government has spent on the black money issue.

In February 2016, the Modi government came up with a plan to tap into the domestic black money pile. The Finance Minister, Arun Jaitley, in the budget speech made on February 29, 2016, proposed to offer “a limited period Compliance Window for domestic taxpayers to

declare undisclosed income or income represented in the form of any asset and clear up their past tax transgressions by paying tax at 30 per cent, and surcharge at 7.5 per cent and penalty at 7.5 per cent, which is a total of 45 per cent of the undisclosed income". People with black money were given a four-month window between June and September 2016 to come clean on their domestic black money. How this played out we shall look at in the conclusion to the book.

So, if you have black money and are willing to pay 15 per cent extra over and above the top tax rate to the government, the laws of the land won't apply to you. As Jaitley further said in his speech: "There will be no scrutiny or enquiry regarding income declared in these declarations under the Income Tax Act or the Wealth Tax Act, and the declarants will have immunity from prosecution. Immunity from [the] Benami Transaction (Prohibition) Act, 1988, is also proposed, subject to certain conditions."

In an interview to the national broadcaster Doordarshan, Jaitley later said: "It's not a VDIS (Voluntary Disclosure of Income Scheme), and it is not an amnesty." Like a good lawyer, he did not specify what the scheme really was.

Despite what Jaitley said, the scheme was basically an amnesty scheme. Before June 2016, a person evading income tax and found with black money had to pay a penalty of 100 per cent to 300 per cent of the tax evaded. In case of the 'Income Declaration Scheme' of 2016, a tax of 30 per cent along with a 7.5 per cent surcharge and a 7.5 per cent penalty had to be paid, which works out to an effective tax of 45 per cent. This is much lower than the 100 to 300 per cent penalty that needs to be paid normally.[598] If this isn't amnesty, then what is?

The last time an amnesty scheme was offered to those who had black money was in 1997. The scheme was called the Voluntary Disclosure of Income Scheme (VDIS). In fact, the trouble started with the name of the scheme itself. What those with black money had to declare was the wealth they had accumulated by not paying taxes, and not their income.

A tax of 30 per cent had to be paid on undeclared assets. This rate of 30 per cent applied to the value of the asset in the year the transaction had taken place and not the market value of the asset at the time of declaration. This meant that the effective rate of tax was much lower than 30 per cent, once the appropriate market value of

the asset was taken into account.[599]

In fact, this was the major structural problem with the scheme. As Kumar writes:[600]

> Rs. 10,000 crore of taxes were collected through it…. Rs. 33,000 crore worth of assets were declared under the scheme, but the present value of these assets may have been many times this amount. Since detailed data will never be revealed, the exact amount will not be known. The implication is that the State, which went down on bended knees, was again cheated…. An estimate is difficult at [the] best of times…. In brief, 1 per cent of the black wealth may have been revealed.

Also, it is worth mentioning here that the 30 per cent had to be paid out of the current income. Given this, the collection of regular income tax in the year 1997-1998 was impacted. Furthermore, the Comptroller and Auditor General (CAG) looked into the VDIS and made a few very interesting observations.

The CAG report pointed out that the VDIS "provided the declarants with an opportunity for widespread misuse by undervaluation of jewellery, bullion, shares and real estate, and also the 'creation' of capital loss to set off against income in future years".[601]

Over and above this, the report made a very interesting point which Messrs. Jaitley and Co. should be aware of. As the report pointed out: "The track record of [the] declarants showed a clear scenario where they were found to have taken advantage of earlier Amnesty Schemes too…. The Scheme was not in the interests of revenue and, in fact, it provided one more opportunity to dishonest assesses to pay tax at a preferred rate and then retire to the old habit of concealing income."[602]

The focal point being that, as long as people anticipate that an amnesty scheme will be offered in the years to come, they are unlikely to be honest about the taxes that they pay.

****

In 2011, the Congress-led UPA government had asked three institutes, the National Institute of Public Finance and Policy (NIPFP), the National Institute of Financial Management (NIFM) and the National Council of Applied Economic Research (NCAER), to estimate the total amount of black money in India. The reports from these institutes have still not been put up in the public domain. "Reports received from these institutes are under examination of the government,"

Finance Minister Jaitley told the Rajya Sabha in May 2015.

The Hindu newspaper had accessed the NIPFP report in August 2014. The NIPFP puts the size of the black money economy at around 75 per cent of the GDP. This estimate is much bigger than the previous estimates.[603] The last official study for estimating black money had been carried out by the NIPFP way back in 1985 on the request of the Finance Ministry. The study put the size of the black money anywhere between 15-21 per cent of the GDP.

If we compare the 1985 study figures to the latest NIPFP black money figure, there has been a huge jump in the generation of black money, with the black money economy now accounting for nearly 75 per cent of the GDP. One explanation for this rise is the rise of the services sector over the last thirty years. The share of the services sector in the GDP has risen from 40.4 per cent in 1985-1986 to 59.9 per cent in 2013-2014. As Kumar points out: "The services sector lends itself to black income generation, since a) valuation of activity is difficult, and b) it has a large component of the unorganised sector in it."[604]

The new NIPFP report, referred to above, states that real estate remains the biggest source of black money transactions. The amount of black money from real estate is estimated to be bigger than the plan expenditure of the government. The plan expenditure is essentially money that goes towards the creation of productive assets through schemes and programmes sponsored by the central government. The plan expenditure of the government for the financial year ending March 31, 2013 had stood at Rs. 4,53,327 crore. Now that is a huge amount of money.

The other major sectors generating black money are private education and mining. Politicians running this country have significant interests in real estate, mining and the education business. The report estimated that, in 2012-2013, the capitation fees collected by private colleges on what are known as management quota seats had stood at Rs. 5,953 crore.

The other major black money spinners are the subsidies given by the government. *The Hindu* reported, regarding the new NIPFP report, that: "Diversion of subsidised kerosene to the open market is estimated to have generated as much as Rs. 11,910 crore."[605] This was half the total amount of the kerosene subsidy provided in 2013-2014.

It wouldn't be surprising to know that black money is being generated from other subsidies offered by the government as well. In fact, the Economic Survey of 2015-2016 reveals that 46 per cent of the kerosene distributed through the Public Distribution System (PDS) is siphoned off and sold in the open market. This is true about other subsidised products like rice, wheat, sugar and cooking gas as well.

These leakages hurt the government in two ways. First, it leads to a major portion of the subsidies being wasted. Secondly, it leads to the generation of black money, and that, as explained earlier in the chapter, has its own share of consequences. The government is trying to tackle this through cash transfers directly to the public instead of following the subsidy route, whereby a product is sold at a lower price for one section of the population.

****

The Annual Report of the Ministry of Finance for 2013-2014 points out that the number of income tax assessees in 2013-2014 had stood at a mere 4.7 crore. The Annual Report for 2015-2016 said that 76.04 lakh new assessees were added during 2014-2015. The increase in the number of assessees during 2014-2015 has been decent, even though the overall number of income taxpayers in a country of around 130 crore people continues to remain low.

And by laying out the red carpet for the tax cheats who have managed to move their black money abroad or still have it in India, what message is the government sending out to the individuals who have faithfully been paying their taxes? This is not the best way to go about trying to increase the number of people who pay income tax. The point being that the growth of tax compliance is anyway very slow and, on top of that, if the government keeps laying out the red carpet for those who have black money, what future does tax compliance really have in this country?

Furthermore, as mentioned earlier, the former Finance Minister, P Chidambaram, had said in his February 2013 budget speech that there were only 42,800 people with a taxable income of Rs. 1 crore or more. In April 2016, the top finance bureaucrat Hasmukh Adhia had said: "There are only 1.5 lakh individuals whose total income would be above Rs. 50 lakh."

What this tells us clearly is that there is widespread tax evasion in the country. This tax evasion continues to generate a lot of black

money, a major part of which continues to remain in the country. This is the black money that the government should be going after, instead of having dreams of getting back the black money that has already left Indian shores.

Information technology can play a huge part in this. In fact, it already has. As the FICCI report cited earlier points out: "The Integrated Taxpayer Data Management System is a data-mining tool implemented by the Income Tax Department that is used for detection of potential cases of tax evasion. The tool assists in generating a 360-degree profile of the high net-worth assessees." The government should work towards making this tool even more robust by building more data into it in the days to come.

Furthermore, it has to get cracking on the real estate sector, where the maximum amount of black money is invested. This black money generates more black money. Going after the biggest property dealers of the National Capital Region, where most of the black money changes hands, might be a good starting point. While real estate is a huge generator of black money, it is also a huge conduit. In fact, it is difficult to estimate where one link ends and another starts. If this has to change, then the nexus between builders and politicians needs to be broken. For this to happen, the political parties need to be brought under the ambit of the Right to Information Act. And that, as we shall see in the conclusion to the book, is easier said than done.

One viewpoint is that the black money that remains in the country has some benefits. As Ha-Joon Chang writes in the context of a minister taking a bribe (which is also black money, given that the minister is not going to declare the bribe as an income): "A bribe is a transfer of wealth from one person to another. It does not *necessarily* [emphasis original] have negative effects on economic efficiency and growth."[606] If the minister taking the bribe decides to spend/invest that money in the country, it has a positive impact on economic growth, as the spending creates economic demand and the investment creates jobs.

At least in theory, the idea seems to make sense. In comparison, the black money leaving the country is a total waste. As Chang writes: "A critical issue… is whether the dirty money stays in the country. If the bribe is deposited in a Swiss bank, it cannot contribute to creating further income and jobs through investment—which is one way

odious money can partially 'redeem' itself."[607]

Hence, as per Chang, black money, if invested properly, can create jobs as well as economic growth. In the Indian case, a lot of this money gets invested into gold and real estate. Money going into gold does not create any jobs. And money that goes into real estate has driven up home prices, in particular, all over the country to extremely high levels. Most middle-class Indians cannot afford to buy a home now.

As mentioned earlier, a huge number of homes that have been built and sold continue to remain unoccupied. Furthermore, there are a huge number of homes that have been built but are not finding any buyers. Estimates made by real estate consultants put this number at around seven lakh across the top metropolitan cities.

In a normally functioning market, the prices of these flats would have fallen, and they would have got sold. But builders cannot cut prices because they don't want to hurt their original investors, who had helped finance the real estate project.[608] In many cases, these investors happen to be politicians who have helped finance the project by investing their ill-gotten black money into it. Hence, the black money of politicians keeps real estate prices high. And that is not a good thing.

Another point that also needs to be made here is that affordable housing has to see the light of day if the *Make in India* programme has to take off. If employees are to be attracted to work in factories and industries that will be built in the years to come, affordable housing around the sites needs to be available. And this will only happen if the nexus between builders and politicians is broken down.

Given this, it makes tremendous sense for the government to work towards ensuring that the total amount of black money being generated comes down instead of making noises about recovering the black money that has already left the shores of this country.

Furthermore, the focus should be on ensuring that the number of people paying income tax goes up in the years to come. Finance Minister Jaitley told the officials of the Income Tax Department in May 2015: "You have the responsibility to recover every rupee which is due to the government…. A tax is either payable or not payable. If it is not payable, then no attempt has to be made to recover it; but if it is payable, then there is no scope for any collateral consideration [as

to] why it must not be recovered for the government."[609]

All this boils down to the Income Tax Department and how it goes about recovering black money. The past evidence isn't very encouraging, as can be seen from Table 9.7.

Table 9.7, on seized assets and undisclosed income, makes for a very interesting read. The value of seized assets was higher in 2011-2012 than it is now. In fact, the undisclosed income identified peaked in 2011-2012, and then fell dramatically. What this clearly tells us is that the record of the Income Tax Department in going after black money over the past few years has not been particularly good and can, at best, be described as erratic.

One possible explanation for this is the fact that, when corruption during the second term of the UPA peaked, the Income Tax Department stopped going after people with a serious amount of black money, and that it has still not managed to change its course. While we may keep thinking of reasons, what this data clearly tells us is that Jaitley was being overly optimistic regarding the black money recovery skills of the Income Tax Department. And that clearly is not good news for all the black money recovery plans that the government has.

Table 9.7: Recovery of black money between 2009 and November 2015.

Financial Year	Seized Assets (in Rs. crore)	Undisclosed Income (in Rs. crore)
2015-2016 (up to November 2015)	470	6,167
2014-2015	762	10,288
2013-2014	808	10,792
2012-2013	575	10,292
2011-2012	906	14,017
2010-2011	775	10,649
2009-2010	964	8,101

Source: Annual Reports, Ministry of Finance.

In fact, Prime Minister Modi, in an address to the nation through his *Mann ki Baat* radio programme on June 26, 2016, said:

> We lose our peace by violating rules. Why not give correct information about our income and assets to the government?... The government has presented before the country a special facility to disclose undisclosed income by the 30th

> of September [2016]…. We can… free ourselves of various burdens just by paying a fine. I have also promised that [regarding] those who voluntarily declare to the government their assets and their undisclosed income, the government will not conduct any kind of enquiry. Not once will they be asked from where all this wealth came and how it was acquired…. I had even told the Members of... Parliament that, after 30th September, if any citizen is put through any difficulty, the one who does not want to follow [the] due rules of government, then it will not be possible to help them. I want to say this to the people of the country: that we do not wish that after 30th September anything should happen that will cause difficulties for you.

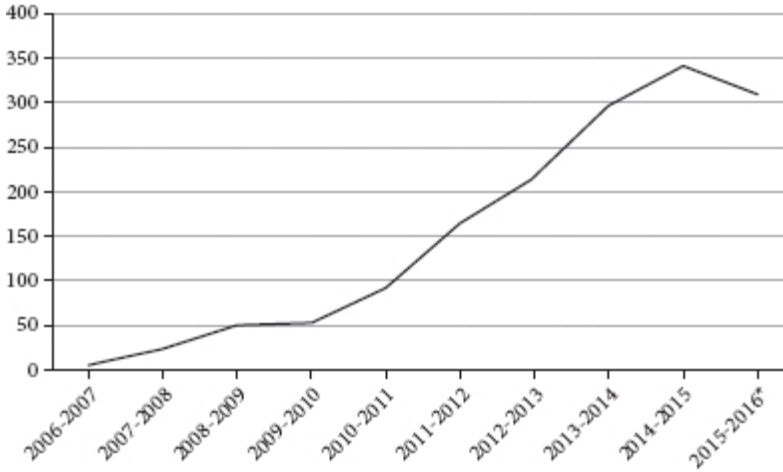
The message from Modi is clear to those with black money: Come clean, or else the Income Tax Department will come after you. It is important that Modi and Jaitley not overdo this by setting ambitious recovery targets for the Income Tax Department. There is something that they can learn here from the Indonesian President Joko Widodo, who assumed office in 2014.

Widodo wanted to up the tax-to-GDP ratio, which was at 12 per cent. Some of his advisers suggested that he try to fix the problem by getting the tax collectors to increase the tax collections by 50 per cent in a year. The Finance Ministry cut this to 30 per cent. Even the lower target of a 30 per cent jump was too much to achieve during the course of one year.

As Sharma writes: "In order to hit the target, tax agents resorted to such means as staking out car dealerships and real estate sales offices to collect on the spot. Not surprisingly, car, motorbike and property sales slumped. Businessmen deferred their investment plans, and the economy slowed [down] further." While Widodo had the right idea for the long term, it did hurt in the short term.[610]

This is a mistake that India should not be making. The Income Tax Department should not be allowed to run loose. Furthermore, it is important to keep working on getting more and more people onto the digital financial system, so that more and more data is collected and can be tracked to build proper 360-degree profiles. As can be seen from Figure 9.2, the number of income tax returns being filed electronically has gone up over the years. The aim should be to make the tax-filing process simpler, so as to get more and more people to file their tax returns. This would go a significantly longer way in helping more people come under the income tax bracket and, correspondingly, increase the government's tax collections.

Figure 9.2: Number of tax returns filed electronically since 2006 (in lakhs).



* Up to November 2015.

Source: Annual Report, Ministry of Finance (2015-2016).

At the same time, it is important that the Income Tax Department go after those in the upper echelons of society who have black money. The recovery rate of the department is currently pretty low, and this needs to improve significantly in the years to come.

Interestingly, over the past few years, the government's tax-to-GDP ratio has come down. In 2007-2008, the tax-to-GDP ratio was at 11.9 per cent. By 2015-2016, this had fallen to 10.6 per cent. This means that the government lost out on taxes worth Rs. 1,76,000 crore in 2015-2016. This is a huge number, and much more than the black money that will ever be recovered.[611]

Tax collection can be improved by cutting down on the Big Government that affects the tax-filing process. It needs to be made simpler. Furthermore, as mentioned earlier, the income tax laws need to be made simpler as well. All this would help many more people come under the tax bracket and start filing tax returns.

[xvi] During the final stages of writing this book, the Income Tax Department released data for the assessment years 2013-2014 and 2014-2015.

10. THE FISCAL DEFICIT FUDGE

REPORT
CARD

> Statistics are like bikinis. What they reveal is suggestive, but what they conceal is vital.
>
> – Aaron Levenstein

As we have seen, Big Government can prove to be very expensive. In some cases, the expense can be expressed in terms of money. Take the case of the many public sector enterprises losing a lot of money every year. A substantial part of these losses are bankrolled by the government. Or take the case of State Electricity Boards' accumulated losses of close to Rs. 4,00,000 crore.

Then there is the case of the leakage of food, fertilizer and petroleum subsidies, which is ultimately government expenditure getting wasted and not reaching those it is intended for.

But there are also things like black money, which are also partly a result of Big Government and which prove to be expensive for the government. As discussed earlier, black money leads to the government earning lower taxes. It also leads to other repercussions, like inequality and higher interest rates. The trouble is that it is difficult to put an exact number as to how expensive this turns out to be.

Nevertheless, all these things have an impact on the fiscal deficit of the government. Fiscal deficit is the difference between what a government earns and what it spends. It is normally expressed as a percentage of the GDP.

If a government finances loss-incurring companies, either its expenditure goes up or it has to cut down on its expenditure in other, more important allocations like health and education. Subsidy leakage also means that the government has to spend more than it should if it wants to reach a larger proportion of the population. This leads to a higher fiscal deficit. In the case of black money, lower tax collections lead to lower government revenues, which in turn lead to a higher fiscal deficit.

It is important that the government maintain a certain level of fiscal deficit. Typically, it is felt that a fiscal deficit amounting to

around 3 per cent of the GDP is good enough. This is because any government finances its fiscal deficit by borrowing from the financial markets. The government borrows by selling government bonds.

When the government sells bonds, it takes away savings from the financial system. These savings could have gone somewhere else instead. Hence, excessive borrowing by the government tends to lead to higher interest rates. Given this, it is important that the government borrow money to finance its fiscal deficit only within certain limits.

The various Indian governments over the years have been trying to achieve a fiscal deficit of 3 per cent of the GDP. In fact, the current Finance Minister, Arun Jaitley, also started his term with the aim of achieving the holy grail of fiscal deficits.

As he said in his first budget speech in July 2014: "We need to introduce fiscal prudence that will lead to fiscal consolidation and discipline. Fiscal prudence to me is of paramount importance because of considerations of inter-generational equity. We cannot leave behind a legacy of debt for our future generations. We cannot go on spending today, which would be financed by taxation at a future date."

He further said: "One fails only when one stops trying. My road map for fiscal consolidation is a fiscal deficit of 3.6 per cent [of the GDP] for 2015-16 and 3 per cent for 2016-17." Jaitley's point was that, if the government spends more now, its borrowing will go up. And these borrowings will have to be repaid by taxing future generations, which, of course, isn't a good thing.

While presenting the 2015-2016 budget, Jaitley conveniently forgot what he had said in the 2014-2015 budget speech, and pushed forward the fiscal deficit target of 3 per cent of the GDP by one year. As he said in his second budget speech in February 2015: "With the economy improving, the pressure for accelerated fiscal consolidation… has decreased. In these circumstances, I will complete the journey to a fiscal deficit of 3 per cent in 3 years, rather than the two years envisaged previously. Thus, for the next three years, my targets are: 3.9 per cent for 2015-16; 3.5 per cent for 2016-17; and 3 per cent for 2017-18. The additional fiscal space will go towards funding infrastructure investment."

Of course, the Indian government needs to spend money on many things. Given this, its annual budget and the fiscal deficit target evolve as things go along. In 2015-2016, Jaitley wanted to spend more

towards funding infrastructure. And given the sad state of India's physical infrastructure, nobody in their right minds can argue against something like that.

Nevertheless, it needs to be pointed out here that Big Government also has an impact on the fiscal deficit. As mentioned earlier, financing the losses of public sector enterprises leads to increased government expenditure and, in turn, the fiscal deficit going up. The generation of black money also leads to lower revenue for the government, and subsidy leakage leads to the government having to spend more in order to reach those whom the subsidies are intended for. These also mean a higher fiscal deficit. In the Economic Survey of 2014-2015, it was estimated that the total subsidies offered by the union government amounted to Rs. 3,77,616 crore, or 4.24 per cent of the GDP.

This included subsidies on rice, wheat, sugar, pulses, kerosene, cooking gas, electricity, water, railway services and fertilizers. Take the case of kerosene. As the Survey points out: "PDS kerosene allocations significantly exceed consumption in nearly every state – that is to say, nearly all states show a large amount of PDS kerosene leakage. In absolute terms, leakages are greatest in UP, West Bengal, Gujarat and Maharashtra; in per capita terms, leakages are greatest in Haryana, Gujarat and Punjab; and in percentage of actual allocations, they are greatest in the North-Eastern states of Manipur, Sikkim and Arunachal Pradesh."

The Survey points out that the fertilizer subsidies amount to a total of Rs. 72,000 crore. The subsidy on urea (a type of fertilizer) amounts to Rs. 50,300 crore. Of this, only Rs. 17,500 crore, or around 35 per cent, reaches the small and marginal farmers, who are the intended beneficiaries.

As the Economic Survey of 2014-2015 points out: "Leakages not only have the direct costs of wastage, but also the opportunity cost of how the government could otherwise have deployed those fiscal resources."

What Big Government also does is push the fiscal deficit of the government beyond a comfortable level of both the target that has been set in the budget as well as the long-term target of 3 per cent of the GDP.

Despite this, finance ministers are still able to meet the target that

they have set. How is this possible? As explained earlier, fiscal deficit is expressed as a percentage of the GDP. While, the GDP figure is not really under the control of the government, the fiscal deficit figure is. Over the years, this fiscal deficit figure has been manipulated to arrive at the target that has been set in the previous budget.

Let's take the case of 2015-2016. While presenting the budget in February 2015, Jaitley had set a fiscal deficit target of 3.9 per cent of the GDP. And this target was achieved.

The question is: How? This was done by not paying food and fertilizer subsidies worth more than Rs. 1,00,000 crore. As the economist Ashok Gulati wrote in a December 2015 column: "The… unpaid fertilizer and food subsidy bills have together already crossed Rs. 1,00,000 crore."[612] The fertilizer subsidy bills that were unpaid at that point of time had stood at Rs. 40,000 crore. Gulati expected the unpaid fertilizer subsidy bills by the end of the year to touch Rs. 48,000 crore.

At the same time, it was expected that food subsidies to the tune of Rs. 70,000 crore would remain unpaid to the FCI (the Food Corporation of India) by March 2016.[613] By not acknowledging the more than Rs. 1,00,000 crore that had already been spent as food and fertilizer subsidies, Jaitley was essentially able to meet the fiscal deficit target of 3.9 per cent of the GDP for 2015-2016.

The government follows the cash accounting system and only acknowledges expenses once payment has been made. This has led to a situation wherein subsidy payments to the FCI and the fertilizer companies remain unpaid. The money has been spent by the FCI and the fertilizer companies towards the subsidy, but remains unpaid by the government, and hence, is not acknowledged as an expenditure.

The question is: Where does the FCI get this money from? It borrows from the financial market. Why does the market lend money to the FCI? It does that because it knows that it is effectively lending money to the Indian government. Hence, this subsidy expenditure has already been incurred by the government, but has not been accounted for.

This is not a good practice, given that the aim of any accounting process should be to put forward the correct financial picture. By postponing the payment of bills, the government beats that very purpose. It needs to be pointed out here that this isn't something that

the Narendra Modi government started. It was something that they have inherited from the previous Congress-led United Progressive Alliance government. This is something that Jaitley's predecessor, P Chidambaram, used to do, and Jaitley has simply carried on with the practice.

Prudent accounting demands that these expenditures be accounted for during the course of the financial year. One can understand that the government may not be able to account for it in just one year, but then it always has the option of accounting for it over a period of two years. But not accounting for an expense in order to meet the fiscal deficit target is simply not correct, not to mention not good economics.

In fact, there is another trick that Indian governments over the years have resorted to in order to come up with a lower fiscal deficit figure. As the then RBI Governor, Raghuram Rajan, had said in a January 2016 speech: "The consolidated fiscal deficit of the state [governments] and Centre in India is by far the largest among countries we like to compare ourselves with; presently, only Brazil, a country in difficulty, rivals us on this measure. According to IMF estimates (which is what the global investor sees), our consolidated fiscal deficit went up from 7 per cent in 2014 to 7.2 per cent in 2015. So, we actually expanded the aggregate deficit in the last calendar year."[614]

The reason why the government's figures are different from the IMF figures is because the government of India underdeclares its fiscal deficit. How does it do it? One way, explained above, is by not accounting for expenditure that has already been incurred. Another trick that the government uses is to recognise the divestment of shares in central public sector enterprises as a revenue rather than as a financing item, as practised by the IMF.

As the economist Rajiv Malik of Credit Lyonnais Securities Asia (CLSA) puts it: "The FY 16 [financial year 2015-2016] budget deficit target—adjusted for divestment—was actually 4.4 per cent of the GDP, not 3.9 per cent, as officially reported."[615]

Hence, one of the repercussions of Big Government is the underdeclaration of the fiscal deficit. Also, as we shall see, this is not the only negative effect of Big Government on the finances of the

union government.

****

When Narendra Modi was sworn in as the Prime Minister of India on May 26, 2014, the price of the Indian basket of crude oil was at $108.10 per barrel. By the end of September 2016, the price was around $43.50 per barrel. Interestingly, it even touched a low of $26.95 per barrel on February 12, 2016. Between May 2014 and February 2016, the oil prices saw a massive fall of 75 per cent.

In fact, oil prices fell dramatically within months of Modi taking over as Prime Minister. By mid-October 2014, the price of the Indian basket of crude oil had fallen to $83.80 per barrel. The government used this opportunity to deregulate the price of diesel. Until then, the price of diesel had been decided by the government.

Before October 2014, this led to a situation wherein the oil-marketing companies (Bharat Petroleum, Hindustan Petroleum and Indian Oil Corporation) had to sell diesel at a price which was below their cost price. The government, along with the oil production companies (Oil and Natural Gas Corporation, and Oil India Ltd.), had to compensate the oil-marketing companies for these under-recoveries.

This led to the expenditure of the government going up. A higher expenditure meant a higher fiscal deficit, and this had its own set of problems.

Trying to manage the price of a commodity is another excellent example of Big Government. As the economist Henry Hazlitt writes in *Economics in One Lesson*:[616]

> We cannot hold the price of any commodity below its market level without in time bringing about two consequences. The first is to increase the demand for that commodity. Because the commodity is cheaper, people are tempted to buy, and can afford to buy, more of it.... In addition to this, production of that commodity is discouraged. Profit margins are reduced or wiped out. The marginal producers are driven out of business.

The demand for diesel went up in the form of people buying more and more passenger cars that ran on diesel, given the substantial difference between the price of petrol and diesel. (Remember that petrol prices were already deregulated, but diesel prices were deregulated only in October 2014.) Hence, before October 2014, the government of India was indirectly subsidising diesel car owners. This meant that rich consumers ended up consuming more than their fair

share of diesel.

As Hazlitt writes in this context: “Unless a subsidised commodity is completely rationed, it is those with the most purchasing power that can buy most of it. This means that they are being subsidised more than those with less purchasing power…. What is forgotten is that subsidies are paid for by someone, and that no method has been discovered by which the community gets something for nothing.”[617]

As the government subsidised diesel car owners and incentivised car companies towards selling more and more diesel cars, its expenditure went up. And this expenditure largely benefited the rich carowning class. Of course, the money that went towards subsidising diesel and diesel cars could easily have gone towards education, health, the environment, and so on. But that is not how things eventually turned out.

The regulation of diesel prices also drove private marketers of oil (Reliance, Essar, etc.) out of business, as suggested by what Hazlitt had to say on the issue. Until October 2014, the government-owned oil-marketing companies were compensated by the government and the upstream oil companies for selling diesel at a lower price. There was no such compensation for the private oil marketers, and hence, they had to shut down their business.

Furthermore, the upstream oil companies, which actually produced oil, had lesser amount of money available to prospect new oil fields. It is worth being reminded here that India imports nearly four-fifths of its oil needs. If this dependence on foreign oil has to come down, the Indian oil production companies need to produce more oil. This can only happen if they start exploration for more oil fields. And exploring oil fields is a costly affair that requires a lot of money.

As mentioned earlier, since, by October 2014, the price of oil had fallen to $83.80 per barrel from $108.10 per barrel in May 2014, the government used this opportunity to deregulate the price of diesel. As Finance Minister Jaitley, who often acts as spokesperson for the Modi government, said after the decision was made by the Union Cabinet: “Henceforth—like petrol—the price of diesel will be linked to the market…. Whatever the cost involved, that is what consumer will have to pay.”

The proposal to allow oil-marketing companies to decide the price of diesel was first made in 1997, when Inder Kumar Gujral was the

Prime Minister. The price of petrol and diesel were finally deregulated in April 2002, under the regime of Atal Bihari Vajpayee.

But this decision was overturned in late 2004, around the time oil prices had touched $50 per barrel. In November 2004, Mani Shankar Aiyar, the then Petroleum Minister, had said: “Since January 1, 2004, the government [the previous NDA government]… [had been] dictating even petrol and diesel prices.” He went on to claim that the UPA government had “been far more honest in saying” that it would “control [the] prices of cooking and auto fuels”.[618]

And this is how things stood till October 2014, when diesel was finally deregulated again. This had become necessary, given that, in the previous two financial years (i.e., 2012-2013 and 2013-2014), the total petroleum subsidies had amounted to around Rs. 1,82,360 crore. In fact, it was estimated that around half of this was due to the under-recoveries on diesel. The remainder was due to under-recoveries on cooking gas and kerosene.

Furthermore, it was estimated that, for every one dollar increase in the price of oil globally, India’s petroleum subsidy bill went up by a billion dollars.[619] This deregulation of diesel prices, along with the fall in oil prices, helped the government bring down the petroleum subsidy. The point is that, if this hadn’t happened, the finances of the Modi government would have gone for a toss totally. The petroleum subsidy figure fell from Rs. 92,000 crore in 2013-2014 to a little over Rs. 60,000 crore in 2014-2015, to around Rs. 30,000 crore in 2015-2016. For 2016-2017, around Rs. 27,000 crore has been budgeted for the petroleum subsidy.

The government benefited on two counts. First, it got a lower petroleum subsidy bill. Secondly, it captured a large part of this fall in oil prices by increasing the excise duty on petrol and diesel. Between November 2014 and early 2016, the excise duty on oil and petrol was increased nine times.

The total excise duty collected by the government on petrol and diesel in 2014-2015 had stood at around Rs. 1,56,000 crore. This jumped by 59 per cent to a little over Rs. 2,48,200 crore in 2015-2016. Hence, lower oil prices were a huge benefit to the government. The state governments also cashed in by increasing the value-added tax on petrol and diesel.

A press release put out by the Bhartiya Janata Party in February

2016 said that all state governments, except Mizoram, Assam, Tamil Nadu, Chhattisgarh and Gujarat, had increased the value-added tax on petrol and diesel. So both the union government and the state governments, in a way, worked together to ensure that the end consumer did not get the total benefit of lower oil prices.

By increasing the excise duty on petrol and diesel, and not passing on the benefit of lower oil prices to the end consumer (in the form of lower petrol and diesel prices), the government was essentially trying to increase its revenues. This is another way through which the government tries to make up for all the Big Government expenses that it needs to finance during the course of the year. Of course, this was not just to finance the Big Government expenses.

As mentioned earlier, the total revenue that the government has been earning as a proportion of the GDP has also fallen over the years. In 2007-2008, the tax-to-GDP ratio was at 11.9 per cent. By 2015-2016, this had fallen to 10.6 per cent. This means that the government lost out on taxes worth Rs. 1,76,000 crore in 2015-2016.[620]

In such a scenario, it is not surprising that the government is looking at other ways to raise its revenues. But this comes with its own share of costs. Soumya Kanti Ghosh, the Chief Economic Adviser of the State Bank of India, made an interesting calculation on this. In a research note titled 'If Wishes Were Horses', Ghosh tried to calculate the total savings that end consumers would have made if the government had not increased the excise duty on petrol and diesel and passed on the entire benefit of the fall in the price of oil.[621]

Ghosh comes to the conclusion that this "would have translated into Rs. 90,000 crore of savings for the consumers". Of course, consumers would have spent this money, and this could have provided an additional demand to the economy to the extent of 1 per cent of the GDP.[622] And that would have been a huge thing. As is well known, the multiplier effect of consumer spending is significantly better than that of government spending, where leakages are huge.

Of course, if the government had done things along these lines, it would have meant that the fiscal deficit of the government would have gone up. If the government had given up taxes to the tune of Rs. 90,000 crore (actually less than this, but I will come to that), its

earnings would have fallen, leading to an increase in its fiscal deficit.

Actually, the increase in fiscal deficit would have been lower than Rs. 90,000 crore. This is because the increase in consumer demand, had the excise duty on petrol and diesel not been raised, would have also brought in some money to the government in the form of both direct and indirect taxes. Of course, it remains difficult to quantify this.

Furthermore, there were other ways through which the government could have looked at bringing down its fiscal deficit. For starters, it owned 11.2 per cent stake in the cigarette maker ITC through the Specified Undertaking of the Unit Trust of India. This stake, as on March 31, 2016, was worth close to Rs. 19,610 crore. Why does the government, which runs anti-tobacco advertisements, continue to own a cigarette manufacturing company?

This stake could have been sold, and a significant portion of the increase in the fiscal deficit could have been covered. Those who like to support the Modi government on all issues like to point out that the ownership of ITC shares brings in a dividend for the government. Hence, why let go of this regular income?

The question to ask here is: What is the dividend yield of ITC? Well, it's only 1.7 per cent. Dividend yield is the total dividend the company has paid out during the year divided by its current market price. The dividend yield of ITC is less than half of the return of 4 per cent available on a savings bank account. Given this, the dividend yield argument clearly does not work.

Over and above this, the Life Insurance Corporation (LIC) of India owns a 14.4 per cent stake in the company. Effectively, the government owns one-fourth of ITC. Hence, this stake could easily be strategically sold at a price which is better than the prevailing market price.

Also, the government continues to run many loss-incurring companies. This costs the government more than Rs. 20,000 crore every year. The government keeps bearing these losses. If many of these loss-incurring companies are shut down and their assets (primarily land) gradually monetised, it would tremendously benefit the government. The government has started to make some noise along these lines, as we shall see in the conclusion to this book.

Jaitley said in his February 2016 budget speech: “A new policy for [the] management of Government investment in Public Sector Enterprises, including disinvestment and strategic sale, has been approved. We have to leverage the assets of Central Public Sector Enterprises (CPSEs) for [the] generation of resources for investment in new projects. We will encourage CPSEs to divest individual assets like land, manufacturing units, etc. to release their asset value for making investment[s] in new projects.” Let’s hope that this doesn’t end up as just another paragraph in a finance minister’s speech.

The disinvestment target at the beginning of 2015-2016 was set at Rs. 69,500 crore. Only Rs. 25,313 crore was achieved. Hence, if the government had made an effort to earn money through these routes, it wouldn’t have had to increase the excise duty on petrol and diesel nine times since November 2014. But that would have called for the cutting down on Big Government, which, at the risk of sounding very clichéd, is easier said than done.

11. IT'S NOT THE INTEREST RATE, STUPID!

BANK

> If you owe your bank a hundred pounds, you have a problem. But if you owe a million, it has.
>
> – JOHN MAYNARD KEYNES

Big Government in India is nowhere more obvious than when it comes to banking. The government-owned Public Sector Banks (PSBs) had given out close to 71 per cent of the loans of the Indian banking system (see Table 11.1) as on March 31, 2016. The loans that a bank gives out are essentially an asset for it.

The government is the major owner of the PSBs, though it does not own them completely, given that many of these banks are listed on the stock market.

Table 11.1: Total loans of banks as on March 31, 2016.

	Total Advances/ Loans (in Rs. crore)	Total Net Profit in 2015-2016 (in Rs. crore)
Private Sector Banks	19,39,339	41,314
Public Sector Banks	55,93,577	−17,992
Foreign Banks	3,63,388	10,828
Total	78,96,304	88,562
Proportion of loans given out by Public Sector Banks	**70.8%**	

Source: Indian Banks' Association.

The government owning banks is not something out of the ordinary. It is par for the course in countries that Wall Street likes to refer to as the emerging markets, or what used to be the Third World till a few decades ago.

In fact, on an average, the government-owned banks control 32 per cent of all banking assets in the twenty largest emerging markets. The figure is more than 40 per cent in Brazil, China (where the distinction between the government and the private sector is not always clear and

the actual number is likely to be much higher), Indonesia and Thailand. Furthermore, it is 50 per cent or more in Hungary, Malaysia, Russia and Taiwan.[623] In India, the figure is close to 75 per cent, i.e., the government owns close to three-fourths of the banking assets in the country.

And this manifestation of Big Government comes with costs attached to it. Take a look at Table 11.1. Even though PSBs control close to three-fourths of India's banking assets, and 71 per cent of the loans, their total net profit in 2014-2015 stood at Rs. 37,540 crore. This turned into losses of close to Rs. 18,000 crore in 2015-2016. In comparison, the private sector banks made a profit of Rs. 41,314 crore during the course of the year, despite giving out only around one-fourth of the total loans of the Indian banking system.

As Ruchir Sharma writes in *The Rise and Fall of Nations*: "Spend a lot of time in the field and it is all too easy to find evidence that the state is not a competent banker."[624] The situation is not very different in India on the banking front. That the state is not a competent banker has become clear over the past few years. Even though the PSBs have not been in good shape for more than a few years now, it all came into the public consciousness when Vijay Mallya left for the United Kingdom in early March 2016.

Mallya has since become a poster boy for all that is wrong with Indian banking. A big bad capitalist who has taken on loans from PSBs and is now refusing or not in a position to repay them. Media reports suggest that Mallya owes banks around Rs. 9,091 crore. This includes the initial loan amount, the interest that has accumulated on it due to the lack of repayment from Mallya, and the interest that has accumulated on that interest.

Mallya, though, is a small part of a very big problem, as can be made out from Table 11.2.

Table 11.2: Mallya's a small fry.

Corporate Lending			
Year	Gross Advances (in Rs. crore)	Gross NPAs (GNPAs) (in Rs. crore)	GNPA Ratio (Gross NPAs divided by Gross Advances)(%)
2012-13	31,11,761	1,00,118	3.2
2013-14	34,06,025	1,54,955	4.6
2014-15	36,15,133	1,93,123	5.3
2015-16 (till December 2015)	38,41,836	2,60,653	6.8

Source: Jayant Sinha, the then Minister of State in the Ministry of Finance, in a written reply to a question in the Lok Sabha, March 11, 2016.

As can be seen from Table 11.2, the Gross Non-Performing Assets (GNPAs), or bad loans of banks in the form of money that they had lent to corporates, has been going up steeply over the last few years. The corporate bad loans have jumped from around Rs. 1 lakh crore to Rs. 2.6 lakh crore over a period of less than four years.

And how do we define GNPAs, or bad loans? As per the Reserve Bank of India: "An asset… becomes non-performing when it ceases to generate income for the bank." When the corporate borrower stops paying interest and repaying the principal on a loan, the bank typically allows for a grace period of 90 days. After this grace period is over, the bank categorises the loan as a non-performing asset and starts setting aside money (or making provisions) for it. The total sum of such loans forms the gross non-performing assets, or bad loans, of the bank.

For the first year after a loan has been categorised as a non-performing asset, it is referred to as a sub-standard asset. On this loan, 15 per cent of the outstanding loan amount needs to be set aside as a provision.[625]

At the end of the first year, the loan becomes a doubtful asset. For the first year of being categorised as a doubtful asset, 25 per cent of the outstanding loan amount needs to be set aside as a provision. For the second such year, this jumps up to 50 per cent. And for the third year, 100 per cent of the outstanding loan amount needs to be set aside as a provision. Thereafter, the loan is categorised as a loss asset.[626]

Getting back to Mallya, his outstanding loans of a little over Rs. 9,000 crore are just a small part of a large problem. It is worth

remembering here that a loan being categorised as a gross non-performing asset does not mean that all is lost for the bank when it comes to that particular loan. The bank can recover money from the asset that has been offered as collateral against the loan. Of course, this is not as straightforward as it sounds, and there are problems that come with this. In Mallya's case, he had also given personal guarantees to banks while taking loans for Kingfisher Airlines.

****

Table 11.3(a) shows the deterioration of the state of Indian banks over the past few years. As can be seen, the gross NPAs have increased from around 2.4 per cent of the total loans in March 2010 to around 7.6 per cent of the total loans as on March 2016.

The PSBs have been majorly responsible for this deterioration in performance. The bad loans of PSBs as on March 31, 2016 stood at 9.32 per cent of their total loans. The figure was at 3.8 per cent of the total loans in March 2013. What is also interesting is that between March 31, 2015 and March 31, 2016, there had been a huge jump in the gross non-performing assets of PSBs, in particular, and banks, in general.

Table 11.3(a): Bad loans of banks at the end of each financial year over the past few years.

Date	Gross NPAs (in %)	Stressed Assets (in %)	Restructured Assets (in %)
March 31, 2010	2.4	5.4	3
March 31, 2011	2.4	5.9	3.5
March 31, 2012	2.9	7.6	4.7
March 31, 2013	3.4	9.2	5.8
March 31, 2014	4.1	10	5.9
March 31, 2015	4.6	11.1	6.5
March 31, 2016	7.6	11.5	3.9

Source: RBI Financial Stability Reports and Media Reports.

As on March 31, 2016, the bad loans of banks had stood at 7.6 per cent of the loans that they had given out. This figure had stood at 5.1 per cent as on September 30, 2015. It had stood at 4.6 per cent as on March 31, 2015.

This basically means that, between March 2015 and March 2016,

the bad loans of banks had gone up by 300 basis points. (One basis point is one hundredth of a per cent.) Between September 2015 and March 2016, the bad loans of banks had gone up by 250 basis points.

What is interesting, nonetheless, is that between September 2012 and March 2015, the bad loans had gone up by only 100 basis points, from 3.6 per cent of the total loans to 4.6 per cent. So what happened during the year 2015-2016 that led to the proportion of bad loans suddenly going up? The simple answer lies in the fact that the Reserve Bank of India (RBI) cracked the whip and decided to carry out an asset quality review of the banks. The RBI asset quality review covered 36 banks (including all PSBs). This review accounted for 93 per cent of the total lending carried out by the scheduled commercial banks.

And this has led to a scenario wherein the banks are finally getting around to recognising bad loans as bad loans, something they were ignoring earlier. So the question is: What was happening earlier?

As of March 2010, the stressed assets of banks had stood at 5.4 per cent of the total loans. What are stressed assets? The stressed assets figure is obtained by adding the total bad loans to the total restructured assets. Over the past few years, the stressed loans ratio of banks has gone up at a rapid rate, as the banks restructured loans at a rapid pace (as can be seen from Table 11.3(a)). A restructured loan essentially implies that the borrower has been given a moratorium for a certain period, during which he does not have to repay the principal amount. In some cases, even the interest need not be paid. In some other cases, the tenure of the loan gets increased. In this chapter, restructured loans have also been referred to as restructured assets.

As can be seen from Table 11.3(a), between March 31, 2010 and March 31, 2015, the gross NPAs of banks went up from 2.4 per cent to 4.6 per cent, i.e., by 220 basis points. During the same period, the stressed assets went up from 5.4 per cent to 11.1 per cent, i.e., by 570 basis points.

Hence, the stressed assets of banks increased at a much faster rate than the bad loans alone. This was basically because of a rapid increase in the restructured assets between March 2010 and March 2015.

When a bank restructures a loan, it does so with the intention of giving the borrower some time so that he can get back to repaying the

loan. At least, that is the intention. But what really happened in the Indian case was that banks essentially used the restructuring route to postpone recognising bad loans.

The moment a bank recognises a bad loan, it has to start provisioning for it (i.e., setting aside money for it). This is prudent accounting. As the then RBI Governor, Raghuram Rajan, said in a February 2016 speech:

> If the bank wants to pretend that everything is all right with the loan, it can only apply bandaids – for any more drastic action would require NPA classification. Loan classification is merely good accounting…. It is accompanied by provisioning, which ensures the bank sets aside a buffer to absorb likely losses. If the losses do not materialise, the bank can write back provisioning to profits. If the losses do materialise, the bank does not have to suddenly declare a big loss; it can set the losses against the prudential provisions it has made. Thus the bank balance sheet then represents a true and fair picture of the bank's health, as a bank balance sheet is meant to.

But prudent provisioning means that the profit of the bank comes down in the short term. And no one running a bank wants that. Hence, Indian banks, in particular PSBs, went about restructuring loans and, in the process, managed to postpone the bad loans problem.

An estimate made by CRISIL ratings in a note titled 'For banks, no respite from bad loans this year', published in May 2015, suggested that around "40 per cent of [the] assets restructured during 2011-14 [had] slipped into NPAs".[627] This strategy of banks came to be referred to as 'extend and pretend'. This essentially involved passing off bad loans as restructured loans and, in the process, delaying the process of recognising a bad loan.

In a research note titled 'A Growing Need for Indian TARP',[xvii] Anil Agarwal, Sumeet Kariwala and Subramanian Iyer, analysts at Morgan Stanley, point out: "The current managements' policy of 'extend and pretend' is causing banks to move further into problems."[628] The analysts also said that they expected 65 per cent of the restructured loans to turn into bad loans.

What this tells us very clearly is that many loans that banks were restructuring between 2011 and 2015 had already turned into bad loans. The PSBs were primarily the ones doing this because they had many more bad loans to handle in comparison to the private sector banks.

This came to an end after the RBI decided to start the asset quality review. Between September 2015 and March 2016, the bad loans of banks jumped up, and finally, there was some good news for Indian banks. Another massive mess made by the Big Government was finally being brought out into the open.

****

The bad loans of Indian banks jumped from 4.6 per cent as of March 2015 to 7.6 per cent of the total loans as of March 2016. Nevertheless, this was good news for the banks. But how can the bad loans of banks going up be good news? It was good news because the banks (particularly PSBs) were finally getting around to recognising the bad loans for what they essentially were.

This becomes clear from looking at the restructured assets of banks. As on March 31, 2016, they fell to 3.9 per cent. In September 2015, they had stood at 6.2 per cent. The overall stressed assets ratio of banks as on March 31, 2016 stood at 11.5 per cent, against 11.3 per cent as on September 30, 2015.

A stressed asset ratio of 11.5 per cent was basically obtained by adding the bad loans of 7.6 per cent to the restructured assets of 3.9 per cent. In September 2015, the restructured assets had stood at 6.2 per cent, whereas the bad loans had stood at 5.1 per cent, leading to a stressed assets ratio of 11.3 per cent.

What this tells us is that, between September 2015 and March 2016, the stressed assets ratio had gone up by just 20 basis points, from 11.3 per cent to 11.5 per cent. Indeed, this was good news for the simple reason that banks were now being forced to recognise bad loans as bad loans, and not pass them of as restructured assets, like they were doing earlier.

Now let's look at these parameters as applied only to PSBs. The stressed assets ratio of PSBs as on March 31, 2016 had stood at 14.5 per cent. As on September 30, 2015, the ratio had stood at 14.1 per cent. The stressed assets ratio of PSBs is now going up at a slower rate than it was in the past, as can be seen from Table 11.3(b).

Table 11.3(b): The stressed assets ratio of PSBs over the past three years.

Date	Ratio (in %)
March 31, 2016	14.5
September 30, 2015	14.1

March 31, 2015	13.5
September 30, 2014	12.9
March 31, 2014	11.7
September 30, 2013	12.3
March 31, 2013	10.9

Source: RBI Financial Stability Reports.

What this means is that even the PSBs are cleaning up their act by recognising more and more bad loans as bad loans. This wasn't happening in the past. It is now important that they go after the borrowers (especially the larger ones) and recover as much of the loans as they can. The more the loans that they can recover, the lesser will be the capital that the government will have to put into these banks to get them up and running again.

The RBI releases the Financial Stability Report twice a year. The June 2016 report points out that "under the baseline scenario, the gross non-performing assets ratio [bad loans ratio] may rise to 8.5 per cent by March 2017 from 7.6 per cent in March 2016. If the macroscenarios deteriorate in the future, the gross non-performing assets ratio may further increase to 9.3 per cent". The point is that the worst is still not over for India's banks.

Also, unlike many other parts of the world, Indian banks have had almost no trouble with their retail borrowers. Their problems are because of large borrowers and, in particular, crony capitalists.

The crony capitalists and the large borrowers have been responsible for a major part of the bad loans of Indian banks. This basically means that banks need to be aggressive about recovering their loans. Furthermore, it's time that the government, as the owner of the PSBs, start forcing the defaulting promoters to give up their stake in the companies which have defaulted.

Nevertheless, the bigger problem still remains. The bigger problem is the fact that the PSBs continue to remain government owned. The Indian PSBs have ended up in trouble more than a few times before. One of the reasons for this is the politicians forcing these banks to lend to crony capitalists. This is one of the biggest costs of Big Government, one which hasn't been properly quantified by anyone as yet.

And as long as these banks continue to remain government owned, that risk remains, especially given that it is crony capitalists who ultimately finance the electoral ambitions of India's politicians.

****

It needs to be pointed out here that the central government had already infused Rs. 1.02 lakh crore of capital between 2009 and September 2015 into the PSBs.

Rs. 1.02 lakh crore is clearly a lot of money, and this has been taken away from other important areas that the government could have spent it on. For 2016-2017, the government has budgeted Rs. 25,000 crore to be invested in the PSBs. In fact, Finance Minister Arun Jaitley said in his February 2016 budget speech: "If additional capital is required by these Banks, we will find the resources for doing so. We stand solidly behind these Banks." This was Jaitley's way of saying that the government would do whatever it takes to keep these banks going.

The trouble is that this guarantee is going to cost the Indian union a lot of money in the years to come. How much is anybody's guess, but there are several estimates going around. Estimates made by the Committee to Review Governance of the Boards of Banks in India (better known as the PJ Nayak Committee) suggests that, between January 2014 and March 2018, "PSBs would need Rs. 5.87 lakh crores of tier-I capital".

Tier-I capital is the core capital of the bank, and consists of its disclosed reserves as well as its equity capital. The Committee further said that "assuming that the Government puts in 60 per cent (though it will be challenging to raise the remaining 40 per cent from the capital markets), the Government would need to invest over Rs. 3.5 lakh crores".

The government, on the other hand, estimates that "the requirement of extra capital for the next four years up to FY 2019 is likely to be about Rs.1,80,000 crore". This estimate was made as a part of the *Indradhanush* reforms that the government unveiled in order to revamp the PSBs. Of this Rs. 1,80,000 crore, the government, as a major owner of these banks, plans to invest Rs. 70,000 crore between 2015-2016 and 2018-2019. The government hopes that the "improvements in capital productivity will enable PSBs to raise the remaining Rs. 1,10,000 crore from the market".[629]

Even though the government's estimate is around 31 per cent of the Nayak Committee's estimate, it is not a small number by any stretch of imagination. Other than taking away money from more important things, this tendency of the government to keep infusing capital into PSBs builds tremendous moral hazard into the system.

The economist and former Vice-Chairman of the Federal Reserve of the United States, Alan Blinder, writing in *After the Music Stopped*, says that "the central idea behind moral hazard is that people who are well insured against some risk are less likely to take pains (and incur costs) to avoid it".[630]

As Mohamed A El-Erian writes in *The Only Game in Town*: "[It] is the inclination to take more risk because of the perceived backing of an effective and decisive insurance mechanism."[631]

Hence, if the government keeps infusing capital into PSBs and keeps rescuing them whenever they are in trouble, there is no real incentive on the part of the PSBs to run a responsible, viable and profitable business. This is moral hazard at play. It is not surprising that, as of the end of March 2016, the gross non-performing assets of the PSBs stood at 9.32 per cent of their total loans.

The government is keen to hold on to these banks. As the Economic Survey of 2015-2016 pointed out: "The return on assets for most banks is currently less than one-third of the norm of 1 per cent that is considered reasonable. Many, though not all, of the less profitable banks are those with smaller levels of employment." Despite this, the government remains obsessed with the idea of owning 27 PSBs. There has been no effort made to sell out of these banks or even shut them down.

Some of the smaller PSBs are very small. And given this, shutting down a few smaller PSBs which are in trouble is not going to make much of a difference, at least not on the employment and lending fronts. Furthermore, no effort has been made to privatise them either.

Given the state that some of these banks are in right now, there is no way the government is going to get a decent price if it considers selling them. Nevertheless, the chances of these banks being turned around by private management are higher than if they are continued to run as they currently are. In such a scenario, the minority stake that the government would continue to hold in these banks would be worth much more than the current majority stake it holds. The point

being that the government needs to stop looking at these banks as 'family silver'.

In fact, the ambition of the government to run 27 PSBs is an excellent example of all that is wrong with Big Government in India. It doesn't realise that it is a hopeless idea to continue to own and run 27 PSBs. There are more important things that it needs to be concentrating on, but that is not going to happen given the way things have shaped up in India.

****

When it comes to bad loans, the lending carried out by banks to corporates/industry is turning out to be a big pain. Take a look at Table 11.3(c), which shows the gross non-performing assets of the State Bank of India (SBI), which happens to be not just the biggest PSB but also the biggest bank in India.

Table 11.3(c) shows us very clearly that State Bank of India's lending to corporates is primarily responsible for its bad loans. As on March 31, 2016, the total gross NPAs of SBI stood at Rs. 98,173 crore, or 6.5 per cent of the total loans.

Of this, the total NPAs of the corporate sector amounted to Rs. 79,243 crore (large corporate + mid-corporate + SME). This formed 80.7 per cent of the total gross NPAs. The Bank of Baroda, the second largest PSB, also shows a similar trend, with lending to the corporate sector amounting for a major part of its bad loans.[632]

Table 11.3(c): Segment-wise Gross NPAs of the State Bank of India.

Sector	March 2015		December 2015		March 2016	
	NPA (in Rs. crore)	Ratio (in %)	NPA (in Rs. crore)	Ratio (in %)	NPA (in Rs. crore)	Ratio (in %)
Large Corporate	1,510	0.5	8,121	2.6	20,696	6.4
Mid-Corporate	23,029	9.8	30,710	14.3	41,515	17.1
SME	16,387	7.8	17,785	8.4	17,032	7.8
Agriculture	10,652	8.9	10,329	8.5	8,687	6.9
Retail	2,528	0.9	3,154	1	2,458	0.9
International	2,619	1.2	2,693	1	7,785	2.9
Total	**56,725**	**4.3**	**72,792**	**5.1**	**98,173**	**6.5**

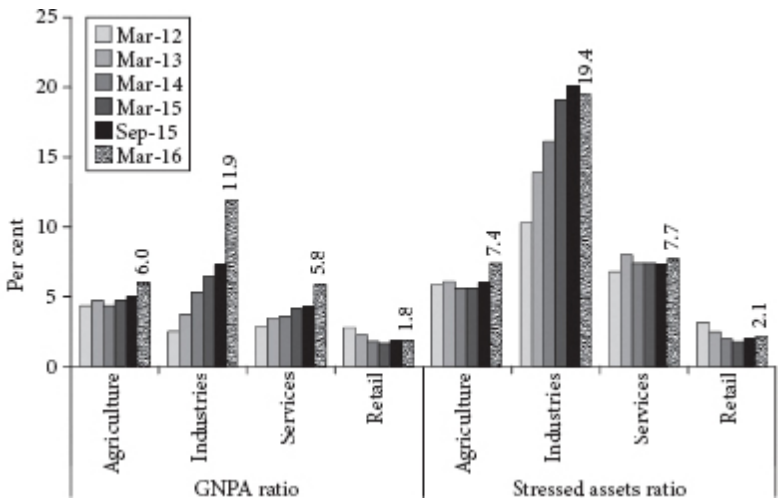
Source: Analyst's presentation (2015-2016), State Bank of India.

This is the broad trend observed across banks, with corporates/ industry bringing in the maximum amount of bad loans.

As can be seen from Figure 11.1, the gross NPAs due to bank lending to industries as a whole stood at 11.9 per cent of their total loans as of March 2016. At the same point of time, their corresponding stressed assets stood at 19.4 per cent, i.e., one-fifth of the loans given out by banks to industry are now in trouble. They have either turned into bad loans or been restructured.

The question is: Why has this happened? Why has such a huge proportion of loans given to one particular sector turned bad? One explanation lies in the fact that much of this borrowing was carried out during the go-go years before 2011, when the Indian economy was doing well and had been growing at greater than 8 per cent per year.

Figure 11.1: Asset quality in major sectors for all banks over the period March 2012 to March 2016.



Source: RBI supervisory returns.

In this scenario, the promoters of companies borrowed and their companies expanded at a rapid rate. As often happens in good times, banks were also more than happy to give out loans. Nevertheless, when the tide turned post-2011, promoters found it difficult to repay their loans.

But this is just a part of the explanation. A major reason for banks ending up with such a huge amount of bad loans from industry lies in the fact that crony capitalism flourished during the second term of the Manmohan Singh government. As the Financial Stability Report of

June 2016 points out: “A risk profile of select industries as… [of] end March 2016 showed that [the] iron and steel industry had high leverage as well as interest burden. [The] construction, power, telecommunications and transport industries also had relatively high leverage.” High leverage refers to a situation wherein the debt of the company is very high with respect to its equity, or, basically, the capital that the promoters have put into the business.

The sectors with high leverage are basically sectors where the crony capitalists ruled the roost during the Manmohan Singh government years. An excellent example here is that of Lanco Infratech. As on March 31, 2014, the company had total loans amounting to Rs. 34,877 crore. Against this, the company had a shareholders’ equity of Rs. 1,457 crore. This means that the company had a debt-to-equity ratio of around 24. Not surprisingly, for the period of the three months ending on September 30, 2014, the company had an operating profit of Rs. 317.23 crore and financial costs of Rs. 773 crore.

Now compare this to what business schools teach in their basic financial management classes: Anything beyond a debt-to-equity ratio of 2:1 is risky. And here, Lanco Infratech had a debt-to-equity ratio of 24:1.

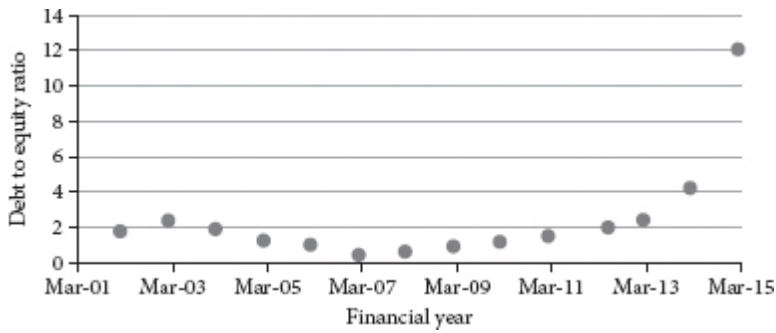
To put it in a simple way, the situation is similar to when an individual approaches a bank for a home loan for a home priced at Rs. 50 lakh. The bank agrees to give a home loan of Rs. 48 lakh and the individual needs to put in only Rs. 2 lakh from his side (which is essentially what equity is) to buy the home. This would lead to a personal debt-to-equity ratio of 24:1.

Of course, no bank would do this and would, instead, ask for a down payment of at least 20 per cent of the home price, or Rs. 10 lakh in this case. In fact, it is interesting to look at the home loan-home value ratio of SBI. The average home loan-home value ratio of the bank as on March 31, 2015 had stood at 53.1 per cent. This dropped to 52.9 per cent by March 31, 2016. Hence, it is safe to say that, on an average, SBI gives home loans which are around half the value of the home that is being bought by the borrower. But the same prudence doesn’t seem to have been followed by banks when it came to lending to corporates.

Getting back to Lanco Infratech, what the figures clearly tell us is that the banks giving loans to this company did not do so with any due diligence or were simply under pressure to hand out the loans. This is not surprising, given that Lanco Infratech's founding Chairman, L Rajagopal, was a Member of Parliament from Vijaywada on a Congress Party ticket in the fifteenth Lok Sabha between 2009 and 2014.

In fact, the senior journalist Shekhar Gupta wrote in *The Indian Express* in February 2014 that Rajagopal's companies got new loans of Rs. 3,500 crore against an equity of Rs. 239 crore, with a leverage of around 14.7:1. Twenty-seven banks were involved in bailing Rajagopal out.[633]

Figure 11.2: The debt-to-equity ratio of IVRCL over the past 15 years.



Source: Author's calculations based on the annual reports of the company.

Another good example of extremely high leverage is a company called IVRCL, which is into construction. The company was in the news when a part of a flyover that the company was building in Kolkata collapsed on March 31, 2016. Figure 11.2 shows that the leverage of the company has exploded over the years, which, as on March 31, 2015, had stood at 12:1.

Raghuram Rajan explained this situation in a November 2014 speech when he said:[634]

> The reason so many projects are in trouble today is because they were structured up front with too little equity, sometimes borrowed by the promoter from elsewhere. And some promoters find ways to take out the equity as soon as the project gets going, so there really is no cushion when bad times hit. Lenders should insist on more real equity up front, and monitor the project closely to ensure it stays in. Promoters should not try and finance mega-projects with tiny slivers of equity.

This is precisely what had happened.

The promoters had very little skin in the game. A research report brought out by EY and titled 'Unmasking India's NPA issues: Can the banking sector overcome this phase?' made the same point as Rajan. It said that while corporates kept blaming the weak economic scenario for their bad loans, "periodic independent audits on borrowers have revealed diversion of funds or wilful default, leading to stress situations".[635]

In fact, Lanco Infratech and IVRCL are just two examples of promoters borrowing much beyond their repayment capacity. There are several other such promoters. Over the past few years, the stock brokerage firm Credit Suisse has been bringing out a series of reports titled *The House of Debt*. The October 2015 version of the report lists many groups which are highly indebted. The report tracks the total debt of 10 Indian business groups which have taken on around 12 per cent of the total loans of the Indian banking system. These groups are the Adani Group, the Essar Group, the GVK Group, the GMR Group, the Lanco Group, the Vedanta Group, the Reliance ADAG Group, the JSW Group, the Videocon Group and the Jaypee Group.

The report makes several important points:[636]

a) The loans given to these business groups amount to 12 per cent of the total bank loans. Furthermore, they amount to 27 per cent of the corporate loans given out by banks. Over the past eight years, the loans of these 10 business groups have gone up seven times. This rise in pace slowed down and, in 2014-2015, the increase was 5 per cent.

b)The interest coverage ratio of these business groups was at 0.8 in 2014-2015, down from 0.9 in 2013-2014. The interest coverage ratio essentially points to the ability of a company to keep servicing its debt by paying interest on it. The ratio is calculated by dividing a company's earnings before interest and taxes (its operating profit) during a given period by the total interest it has to pay on its outstanding debt during the same period.

Typically, companies need to have an interest coverage ratio of at least 1.5 to be considered in healthy financial territory. In this case, the ratio is just 0.8. An interest coverage ratio of less than one means that the company is not earning enough to keep paying interest on its outstanding

debt. Hence these groups are not earning enough to pay the interest on their total debt, leave alone the total principal.

The trouble with any average number is that it does not give us a complete picture. The interest coverage ratios of several groups are well below the average. The GMR Group's is at 0.2, the GVK Group's is at 0, the Lanco Group's is at 0.2, the Videocon Group's is at −0.3 (this basically means that the company has made an operating loss over the given time period), and the Jaypee Group's is at 0.6. These business groups are in a very bad situation when it comes to the ability to keep servicing their respective bank debts.

c)Given that the interest coverage ratios of these firms are in such a mess, it is not surprising that they are already defaulting on their debts. As the Credit Suisse analysts point out: "Rating agencies have now assigned the default 'D' rating to ~ 5-65 per cent of [the] debt for these groups."[637]

d)These highly indebted business groups have tried to repair their balance sheets by selling assets in order to repay their debts. This hasn't helped much, given that, in certain cases, the assets that they had to sell were essentially the ones bringing in the money for the company in the first place.

Take the case of the Jaypee Group. The group has sold assets, and these sales are expected to bring in Rs. 22,000 crore. The trouble is that these assets contributed 59 per cent of its operating profit during 2014-2015. What has not helped is the fact that many projects in the power and road sectors have had cost over-runs due to delays in completion. Some projects have had cost over-runs of 20-70 per cent.

It is also worth mentioning here that the owners of a bankrupt company have no real incentive in acting in the best interests of the company. This is a point that the Nobel Prize-winning economists George Akerlof and Robert Shiller make in their book *Phishing for Phools – The Economics of Manipulation and Deception*.

As they write: "If the owners of a solvent firm pay themselves a dollar out of the firm, they diminish the amount they can distribute to themselves tomorrow by that dollar plus its earnings." Hence, owners of a solvent firm have some incentive to not take out money from it. But that is not the case with the owners of an insolvent (or bankrupt) firm.

As the economists write: “In contrast, if the owners of a bankrupt firm take an extra dollar out of their firm, they will sacrifice literally nothing tomorrow.” And why is that? “Because the bankrupt firm is already exhausting all of its assets paying all those Peters and Pauls [read as ‘banks’ in the Indian case]. Since there will be nothing left over for the owners, they have the same economic incentives as Genghis Khan’s army as it marched across Asia: what they do not take today, they will never see tomorrow. Their incentive is to loot.”

This also explains an oft-repeated business wisdom in India about many Indian firms becoming sick but no Indian industrialist ever going that way. As Rajan put it in a November 2014 speech:[638]

> … [Across] much of the globe, when a large borrower defaults, he is contrite and desperate to show that the lender should continue to trust him with management of the enterprise. In India, too many large borrowers insist on their divine right to stay in control despite their unwillingness to put in new money. The firm and its many workers, as well as past bank loans, are the hostages in this game of chicken.… The promoter threatens to run the enterprise into the ground unless the government, banks and regulators make the concessions that are necessary to keep it alive. And if the enterprise regains health, the promoter retains all the up-side, forgetting the help he got from the government or the banks – after all, banks should be happy they got some of their money back! No wonder government ministers worry about a country where we have many sick companies but no ‘sick’ promoters.

****

Crony capitalism explains only one side of the messy story of the PSBs. There is another side to it, which can be explained through what economists call the ‘principal-agent problem’. This essentially refers to the problem of motivating the agent to act on behalf of the principal. Problems arise when the agent wants to act in his own interests rather than the interests of the principal.[639]

How does this apply in this context? As Vijay Joshi writes in *India’s Long Road*: “The government also suffers from a ‘principal-agent’ problem. Its functionaries (legislators, bureaucrats) may pursue their own agendas rather than act in public interest. They may shirk their duties or feather their own nests. They may make deals that benefit special-interest groups at the expense of the general good.”[640]

This is precisely what happened in the case of the PSBs, where a nexus was formed between the managers who ran the banks and the politicians, who forced these managers to give loans to crony capitalists.

In fact, the EY report referred to a little earlier pointed out that the nexus went way beyond just the managers, politicians and crony capitalists. The report cited a survey carried out by EY, in which 64 per cent of the respondents believed that the bad loans of banks resulted primarily because of lapses in the due diligence carried out by the banks before the loans were sanctioned.[641]

The report went on to suggest that lenders (i.e., the banks) relied on many third-party agencies, like surveyors, financial analysts, engineers, etc., in order to carry out the due diligence. These third-party agencies played an important role in assuring the financial information of the borrower, the work completion status of a project, the application of funds, etc. The entire system was manipulated. In fact, in some situations, the borrowers even managed to get the reports drafted in ways that suited them.

I wrote a column about the EY survey and got a very interesting response from someone who had an insider's perspective of how the loan processing and disbursal process of a PSB actually works. He gave me two examples of the loan disbursal system being manipulated. This ultimately led to several banks ending up with bad loans.

The first case was of an unlisted entity in the luggage manufacturing business. The firm borrowed money from two big PSBs. The promoter of the company offered his equity in the company as well as land and the factory as collateral. This transaction took place in 2007. The valuation report by a third-party agency put the combined value of all the assets at Rs. 35 crore. Against these assets the banks gave a loan of around Rs. 27 crore. The promoter took this loan. He also borrowed Rs. 3 crore more from the banks.

Later, another valuer was brought in to examine the value of the assets, and the value of the assets was then put at a much lower Rs. 19 crore. The old valuer was dismissed, but by then the damage had already been done. The bank had given out a loan of Rs. 30 crore against assets which were worth only Rs. 19 crore. Ideally, the situation should have been exactly the other way around, where the bank should have given out a loan of Rs. 19 crore against collateral worth Rs. 30 crore.

The second case involved a listed company in the building materials space. The company came out with an initial public offering

and was listed at a three-digit price. The price of its shares later crashed.

The company took loans amounting to Rs. 325 crore from two big PSBs and one of the bigger new-generation private sector banks. The promoter did not stop at this. He borrowed more using his other listed entities as well. In 2013, he defaulted on the loans, citing slowdown in the construction activity sector.

He ended up owing around Rs. 1,000 crore to the banks. The book value of the assets that the banks had as collateral was around Rs. 225 crore. The market value was expected to be in the region of Rs. 325-350 crore. The rest of the money was lent by the banks against shares, which, by the time the promoter had defaulted on the loans, had fallen to single-digit levels.

In both cases, the banks ended up with losses. The point is that the crony capitalists and politicians could not have caused the damage that they eventually did without the support of the managers of PSBs as well as the third-party system which supports them.

This is a classic example of the principal-agent problem at work. The incentives of the managers were not in line with public interest, which should have been to give loans which would be repaid and not defaulted on. The managers knew that if they did not listen to the politicians, they were likely to get transferred to a nondescript location, not get promoted and face other problems as well.

Also, in the case of PSBs, salaries are paid on the basis of seniority, and there is no extra payment for performance. As Joshi points out: “In the public sector, managerial incentives are blunted because all profits belong to the state.”[642] On the other hand, private sector banks tend to issue employee stock option plans to well-performing employees. Hence, there is no incentive to go looking for an income beyond what one is paid by the bank.

In fact, the principal-agent problem even came in the way of banks getting around to recognising bad loans as bad loans. It was in the interests of the public sector bankers to keep postponing the problem by not recognising bad loans as bad loans. This was done through restructuring problematic loans and giving out fresh loans to troubled borrowers so that they could repay their maturing loans. Of course, it was in the interests of the public sector bankers to keep hiding bad loans even though it wasn’t in the overall public interest. The first step

towards solving any problem is to recognise that it exists, which clearly wasn't the case here.

****

In the Financial Stability Report published by the RBI in December 2015, there was a very interesting section titled 'In Search of some Old Wisdom'. In this section, the RBI resurrected the economist Hyman Minsky. Minsky has been rediscovered by the financial world in the years that have followed the financial crisis, which started with the investment bank Lehman Brothers going bust in September 2008.

So what does the RBI say about this? "When current wisdom does not offer solutions to extant problems, old wisdom can sometimes be helpful. For instance, the global financial crisis compelled us to take a look at… Minsky's financial stability hypothesis, which posited the debt accumulation by [the] non-government sector as the key to [an] economic crisis."

And what is Minsky's financial stability hypothesis? Actually, Minsky put forward the Financial *In*stability Hypothesis, and not the financial stability hypothesis, as the RBI claims. The basic premise of this hypothesis is that, when times are good, there is a greater appetite for risk, and banks are willing to extend riskier loans than usually is the case. Businessmen and entrepreneurs want to expand their businesses, which leads to increased investment and corporate profits. In the Indian case, it also led to businessmen padding up project costs and siphoning off the money they had borrowed as loans.

Initially, banks only lend to businesses that are expected to generate enough cash to repay their loans. But as time progresses, the competition between lenders increases and caution gets thrown to the winds. Money is doled out left, right and centre, and it normally doesn't end well.

This is the basic premise of the Financial Instability Hypothesis. Minsky essentially theorised that there are three stages of borrowing. The December 2015 Financial Stability Report did explain these three stages. Nevertheless, a better explanation can be found in L Randall Wray's book *Why Minsky Matters—An Introduction to the Work of a Maverick Economist*.

As Wray writes: "Minsky developed a famous classification for

[the] fragility of financing positions. The safest is called 'hedge' finance (note that this term is not related to so-called hedge funds). In a hedge position, expected income is sufficient to make all payments as they come due, including both interest and principal."[643] Hence, in the hedge position, the company taking on loans is making enough money to pay interest on the debt as well as repay the debt itself.

What is the second stage? As Wray writes: "A 'speculative' position is one in which expected income is sufficient to make interest payments, but principal must be rolled over. It is 'speculative' in the sense that income must increase, continued access to refinancing must be expected, or an asset must be sold to cover principal payments."[644]

Hence, in a speculative position, a company is making enough money to keep paying interest on the loan that it has taken on, but it has no money to repay the principal amount of the loan. In order to repay the principal, the income of the company has to go up, or banks need to agree to refinance the loan, i.e., give a fresh loan so that the current loan can be repaid. The third option is for the company to start selling its assets in order to repay the principal amount of the loan.

And what about the third stage? As Wray writes: "Finally, a 'Ponzi' position (named after a famous fraudster, Charles Ponzi, who ran a pyramid scheme—much like Bernie Madoff's more recent fraud) is one in which even interest payments cannot be met, so that the debtor must borrow to pay interest (the outstanding loan balance grows by the interest due)."[645]

Hence, in the Ponzi position, the company is not making enough money to be able to pay even the interest that is due on its loans. In order to pay the interest, it has to take on more loans. This is why Minsky called it a Ponzi position.

Charles Ponzi was a fraudster who ran a financial scheme in Boston in 1919. He promised to double the investor's money in 90 days. This was later shortened to 45 days. There was no business model in place to generate returns. All Ponzi did was to take money from new investors and hand it over to old investors whose investments had to be redeemed. His game got over once the money leaving the scheme became higher than the money being invested in it.

Along similar lines, once companies are not in a position to pay

interest on their loans, they need to borrow more. This new money coming in helps them repay their loans as well as pay interest on them. And while they can keep borrowing more, they can keep paying interest and repaying their loans. Hence, the entire situation is akin to a Ponzi scheme.

This is precisely the point that the RBI was trying to make in the December 2015 Financial Stability Report, though not in a very straightforward way. But then, central banks and central bankers are known to sometimes make very obvious points in a circumlocutory manner.

As we have seen earlier in the chapter, many Indian corporates which have borrowed from banks have very low interest coverage ratios. Hence, they have not been earning enough to keep paying their interest and repaying their principal.

In this scenario, it is but natural for them to degenerate into Ponzi schemes, where fresh money is required to keep repaying interest as well as the principal amount. Of course, this could not have been achieved without the active help of the banks themselves. If banks had not been ready to give them fresh loans, there is no way that these corporates would have been able to run Ponzi schemes. But this is precisely what the banks did.

Let's look at some figures. Between July 2014 and July 2015, banks lent a total of Rs. 1,20,900 crore to industry as a whole. The lending to industry went up by 4.8 per cent, in comparison to the 10.2 per cent growth between July 2013 and July 2014.

The situation gets even more interesting when we take a closer look at the numbers. Bank lending to the infrastructure sector between July 2014 and July 2015 grew by Rs. 71,600 crore. Within the infrastructure sector, lending to the power sector grew by Rs. 59,400 crore. Lending to the iron & steel sector grew by Rs. 27,100 crore during the year.

What does this tell us? Between July 2014 and July 2015, banks gave out Rs. 98,700 crore, or 81.6 per cent, of the Rs. 1,20,900 crore that they had lent to industry to the two most troubled sectors, namely, infrastructure and iron & steel. These sectors formed around 19.5 per cent of the total lending carried out by banks and 40 per cent of their stressed assets.

In fact, this was around the time that the RBI had warned in the June 2015 Financial Stability Report that "the debt servicing ability of power generation companies [which are a part of the infrastructure sector] in the near term may continue to remain weak given the high leverage and weak cash flows. Banks, therefore, need to exercise adequate caution while dealing with the sector and need to continue monitoring the developments very closely".

Hence, the question is: Why were banks still lending to power companies and iron & steel companies? The answer lies in the fact that many of these companies had degenerated into Ponzi schemes by then and needed fresh loans to keep repaying their debts. If the banks hadn't given them fresh loans, they would have defaulted on their loans.

Hence, the banks gave these companies fresh loans in order to ensure that their loans didn't turn into bad loans, and so, in the process, they managed to kick the can down the road. This is again because of the principal-agent problem, where the interests of the managers running the PSBs are not in line with public interest. Of course, the principal-agent problem in this case is because of Big Government.

****

The Reserve Bank of India categorises large borrowers as borrowers with an outstanding loan amount of Rs. 5 crore or more. This is where the problems lie. As the Financial Stability Report of June 2016 points out: "[The] share of large borrowers in total loans increased from 56.8 per cent to 58 per cent between September 2015 and March 2016. Their share in GNPAs also increased from 83.4 per cent to 86.4 per cent during the same period."

This basically means that not only have large borrowers taken 58 per cent of all loans, but they are responsible for 86.4 per cent of all the bad loans. In fact, the bad loans ratio of large borrowers stood at 10.6 per cent as on March 31, 2016. As on September 30, 2015, it had stood at 7 per cent. When it came to PSBs and their lending to large borrowers, the bad loans ratio stood at 12.9 per cent as on March 31, 2016.

Hence, the bad loans to big borrowers have been going up. One reason, as I have explained earlier in the chapter, is that the RBI has been forcing PSBs to recognise bad loans as bad loans.

Of course, even among the large borrowers, there are many categories. While banks are able to go after the small enterprises which have taken on loans and are not in a position to repay them, the same cannot be said about the very large borrowers.

As Raghuram Rajan had said in November 2014, the full force of bank recovery is "felt by the small entrepreneur, who does not have the wherewithal to hire expensive lawyers or move the courts, even while the influential promoter once again escapes its rigour". "The small entrepreneur's assets are repossessed quickly and sold, extinguishing many a promising business that could do with a little support from bankers," Rajan had further said on that occasion.[646]

The Financial Stability Report does not give a detailed breakdown of the large borrowers, but it does give us a very interesting data point about the top 100 borrowers among the large borrowers (basically the biggest borrowers, whose defaults can bring down banks).

As the Report points out: "[The] top 100 large borrowers (in terms of outstanding funded amounts) accounted for 27.9 per cent of credit to all large borrowers…. There was a sharp increase in the share of [the] GNPAs of [the] top 100 large borrowers in [the] GNPAs of all large borrowers from 3.4 per cent in September 2015 to 22.3 per cent in March 2016."

What does this mean? The loans given to the top 100 borrowers among the large borrowers constitute 27.9 per cent of all loans given to the large borrowers. As on September 30, 2015, the bad loans of the top 100 borrowers among the large borrowers had amounted to around 3.4 per cent of the bad loans of all large borrowers. By March 31, 2016, this had jumped to 22.3 per cent of the bad loans of all large borrowers.

What does this tell us? It tells us very clearly that banks were treating its largest borrowers with kid gloves and not recognising their bad loans as bad loans. This could possibly have been done by restructuring their loans. This is the only possible explanation for the bad loans of the top 100 large borrowers jumping from 3.4 per cent of all large borrowers' loans to 22.3 per cent within a period of just the six months between October 2015 and March 2016.

Thankfully, this game is now over. And for that the RBI deserves credit. The bigger challenge now lies ahead. The government, as the major owner of the PSBs, needs to make sure that these largest of

defaulters are made to repay the loans that they have taken on from PSBs. This will ensure that it is payback time for the crony capitalists.

Given that such a thing has rarely happened in the past, it will be interesting to see how the Modi government goes about this. If it can clean this mess up, then the witticism that 'telephone calls from the government to the PSBs have stopped' will acquire a real meaning.

****

Raghuram Rajan took over as the twenty-third Governor of the RBI in September 2013. Throughout his term, calls were made for lower interest rates. Starting in January 2015, Rajan started to cut the repo rate, and at the time of writing this, in July 2016, Rajan had cut the repo rate by 150 basis points. The repo rate is the rate at which the RBI lends to banks on an overnight basis. It acts as a sort of a benchmark to the interest rates that banks pay for their deposits and, in turn, charge on their loans.

One constant criticism of Rajan was that, because he did not cut the repo rate fast enough, both individuals and businesses did not borrow as much as they could have, and this led to the economy not growing fast enough.

Take a look at Table 11.4(a). It shows the non-food credit growth of the scheduled commercial banks over the past seven financial years. Banks give loans to the FCI and other state procurement agencies to buy rice and wheat from the farmers directly at the minimum support price. Once this figure is subtracted from the overall lending carried out by banks, what remains is the non-food credit.

Table 11.4(a) tells us very clearly that the growth in bank lending has slowed down considerably over the years. In fact, it had slowed down the most after Rajan took over as the RBI Governor in September 2013. So does that mean that Rajan should have cut the repo rate faster? This conclusion turns out to be incorrect if we look at some more data. Let's look at the retail lending growth rate (see Table 11.4(b)) over the same period. These include home loans, vehicle loans, credit card outstanding, consumer durable loans, loans against shares, bonds and fixed deposits, and what we call personal loans.

Table 11.4(a): Non-food credit lending growth of banks over the past seven years.

Period	Non-Food Credit Growth (in %)
March 20, 2015 to March 18, 2016	9.1
March 21, 2014 to March 20, 2015	8.6
March 22, 2013 to March 21, 2014	14.3
March 23, 2012 to March 22, 2013	13.5
March 25, 2011 to March 23, 2012	16.6
March 26, 2010 to March 25, 2011	20.6
March 27, 2009 to March 26, 2010	16.8

Source: Sectoral Deployment of Credit Data, RBI.

Table 11.4(b): Retail lending growth of banks over the past seven years.

Period	Retail Lending Growth (in %)
March 20, 2015 to March 18, 2016	19.4
March 21, 2014 to March 20, 2015	15.5
March 22, 2013 to March 21, 2014	15.5
March 23, 2012 to March 22, 2013	14.7
March 25, 2011 to March 23, 2012	12.9
March 26, 2010 to March 25, 2011	17
March 27, 2009 to March 26, 2010	4.1

Source: Sectoral Deployment of Credit Data, RBI.

As we can see from Table 11.4(b), the retail lending growth during 2015-2016 has been the strongest of the past seven financial years. One of the reasons is obviously the fact that the RBI had cut the repo rate by 150 basis points between January 2015 and July 2016.

Now let's take a look at Table 11.4(c), which shows the growth in lending to industry over the past seven financial years. The table clearly shows that the growth in lending to industry has been slowing down over the last seven financial years. The explanation for this is straightforward. As the bad loans due to lending to industry went up, the lending growth to industry slowed down. In fact, if we look at the growth in lending to industry between September 2015 and September 2016, the lending growth to industry has slowed down to 0.9 per cent. The lending to micro and small industries has fallen by 6.5 per cent. The lending to medium-level industries has fallen by 12.7 per cent. Only the lending to industries categorised as large has grown by 3.1 per cent.

Table 11.4(c): Industrial lending growth of banks over the past seven years.

Period	Industrial Lending Growth (in %)
March 20, 2015 to March	2.7

18, 2016	
March 21, 2014 to March 20, 2015	5.6
March 22, 2013 to March 21, 2014	13.1
March 23, 2012 to March 22, 2013	15.1
March 25, 2011 to March 23, 2012	20.3
March 26, 2010 to March 25, 2011	23.6
March 27, 2009 to March 26, 2010	24.4

Source: Sectoral Deployment of Credit Data, RBI.

This tells us very clearly that interest rates are really not the issue, because the growth in retail lending has been the strongest in many years, despite the so-called high interest rates.

Also, banks have started taking into account the risk of default and building that into the interest rates they charge, something that they were perhaps not doing earlier. As Rajan said in a November 2014 speech:[647]

> The promoter who misuses the system ensures that banks then charge a premium for business loans. The average interest rate on loans to the power sector today is 13.7 per cent, even while the policy rate is 8 per cent [the repo rate has since fallen to 6.25 per cent]. The difference, also known as the credit risk premium, of 5.7 per cent is largely the compensation banks demand for the risk of default and non-payment. Since the unscrupulous promoter hides among the scrupulous ones, every businessperson is tainted by the bad eggs in the basket.

The power industry promoters were paying 13.7 per cent interest when the interest on an average home loan was 10.7 per cent.[648]

What Rajan was saying is that the banks also need to build a credit risk premium into the rate of interest. This credit spread is essentially the building in of the possibility of the borrower defaulting into the interest rate being charged. If the risk of default in a particular sector is high, the interest rate banks will charge will also be high. This is the point that Rajan was essentially making. Given this, the good industrialists are paying a higher rate of interest because the chances that the bad ones won't repay their loans are high.

Also, the larger point here is that the basic purpose of any bank is

to lend the money it raises as deposits in a way that compensates it for the risk involved. The job of a bank is not to encourage the industry by offering industrialists loans at a low rate of interest.

Take a look at Table 11.4(d). It shows the retail loans and the loans given to industry as a proportion of the total loans given by the scheduled commercial banks.

As is clear from Table 11.4(d), banks have been giving out a greater amount of retail loans over the years. Retail loans formed 5.3 per cent of the total non-food credit in 2009-2010. By 2015-2016, they had jumped to 41.5 per cent. In fact, if we look at the lending between May 2015 and May 2016, retail loans formed 45 per cent of the total non-food credit loans, whereas loans to industry formed around 4.8 per cent of the total non-food credit loans.

Table 11.4(d): Proportion of non-food credit bank lending to retail and industry over the past seven years.

Period	Retail Loans as a Proportion of Non-Food Credit (in %)	Lending to Industry as a Proportion of Non-Food Credit (in %)
2015-2016	41.5	13.4
2014-2015	33.1	29.8
2013-2014	17	43.4
2012-2013	19.8	50.5
2011-2012	13.8	53.8
2010-2011	17.6	46.6
2009-2010	5.3	58.7

Source: Sectoral Deployment of Credit Data, RBI.

This is a clear case of banks wanting to stay away from lending to industry. In fact, more specifically, this is a clear case of PSBs, on having to deal with a huge amount of bad loans from industry, wanting to stay away from lending to industry.

****

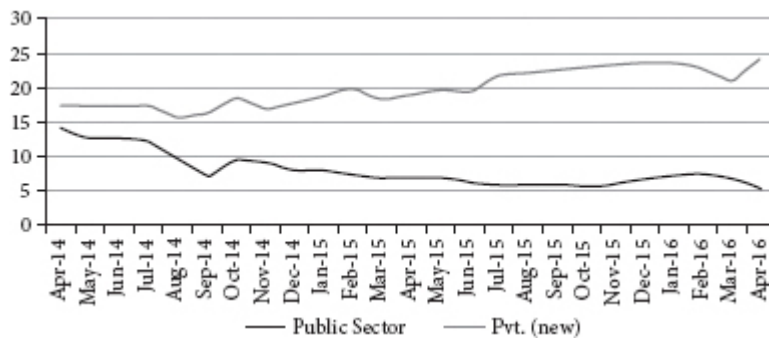
In June 2016, Raghuram Rajan decided to go back to academics and not consider a second term as RBI Governor (not that the role was offered to him). This happened after a string of attacks questioning his being Indian and his American green card, among other things. After

Rajan wrote a letter to the employees of RBI announcing this, many columns appeared in the media justifying the government's decision to not offer Rajan a second term.

The chief argument that was made was that Rajan did not cut interest rates fast enough. Nobody bothered to explain what they meant by fast enough. As Chandan Mitra, a member of the Bhartiya Janata Party (BJP) and a newspaper editor wrote in a column: "Rajan's emphasis on increasing savings fell on deaf ears because the middle class was… now impatient to spend, not save."[649]

The insinuation here is that, if Rajan had cut the interest rates fast enough, the middle class would have borrowed and spent. This would have reinvigorated the Indian economy. This, as we have seen in the previous section, is not true. Retail lending in 2015-2016 has been the strongest in many years. So, clearly Mitra wrote his column without bothering to look up the figures.

Figure 11.3(a): Non-food credit growth over the past two years for both PSBs and private banks (in %).



Source: Reserve Bank of India.

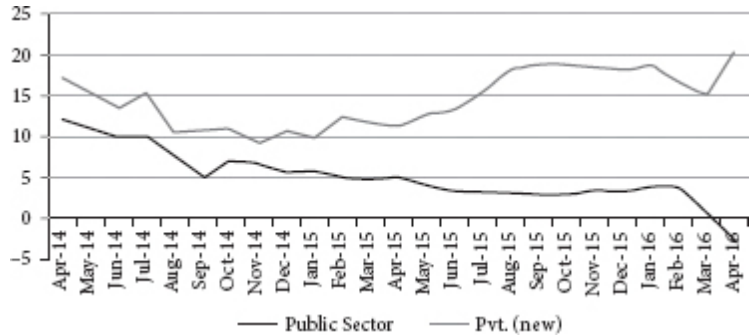
In fact, a few days after deciding to return to academia, Rajan made a speech in which he explained his entire economic philosophy. He made it clear in his speech, while employing pertinent data, that interest rates hadn't held back bank lending. As he said: "The slowdown in credit growth has been largely because of stress in the Public Sector Banking, and not because of high interest rates."[650] Take a look at Figure 11.3(a).

The top curve shows the overall lending growth of the new-generation private sector banks (Axis Bank, HDFC Bank, ICICI Bank and IndusInd Bank) over two years, from April 2014 to April 2016. What this shows very clearly is that the lending growth of the new-

generation private sectors banks has had an upward trend, with a few small blips in between.

In contrast the lending growth of PSBs, the bottom curve, has slowed down considerably over the past two years. Let's look at the bank lending growth in a little more detail. Figure 11.3(b) shows the bank lending growth to industry between April 2014 and April 2016.

Figure 11.3(b): Credit growth to industry over the past two years for both PSBs and private banks (in %).



Source: Reserve Bank of India.

As can be seen from Figure 11.3(b), the growth in loans given to industry carried out by the new-generation private sector banks (the top curve) has been robust. In fact, between April 2015 and April 2016, the lending carried out by these banks to industry grew by close to 20 per cent. Hence, the new-generation private sector banks have been lending to industry at a very steady pace.

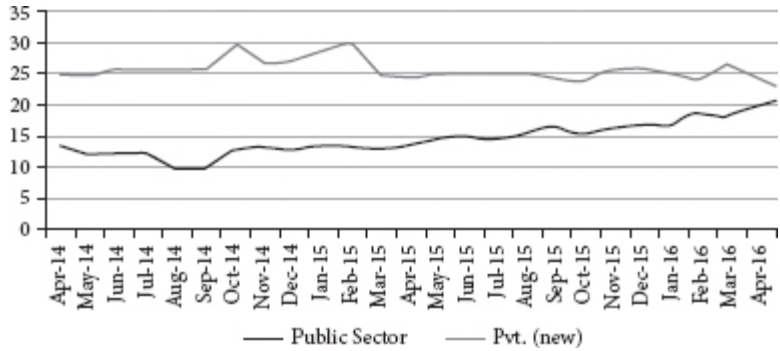
The same cannot be said about the PSBs. Their lending growth to industry has been falling since April 2014. This led many people to believe that high interest rates have slowed down bank lending. As Rajan put it: "The immediate conclusion one should draw is that this is something affecting credit supply from the PSBs specifically; perhaps it is the lack of bank capital."[651]

But, as mentioned earlier in the chapter, both PSBs as well as private banks have been happy to lend to the retail sector. Retail loan growth stood at 19.4 per cent in 2015-2016. Furthermore, retail loans formed 41.5 per cent of all non-food credit given out by banks.

This is precisely the point that Rajan made in his speech. Take a look at Figure 11.3(c), in which the retail lending growth of PSBs (the lower curve) and new-generation private sector banks (the upper curve) have been plotted. (The RBI refers to retail loans as personal

loans, which are not to be confused with what banks call personal loans.)

Figure 11.3(c): Growth in retail loans over the past two years for both PSBs and private banks (in %).



Source: Reserve Bank of India.

As can be seen, the two curves are almost about to meet. What this tells us is that, when it comes to lending to the retail sector, the public sector lending growth is almost as fast as that of the new-generation private sector banks. What one also needs to point out here is that PSBs are lending on a bigger base. And that possibly explains why their retail loan growth is not as fast as that of the new-generation private sector banks, even though it is pretty good on its own.

As Rajan put it in his speech:[652]

> If we look at personal loan growth, and specifically housing loans, PSB loan growth approaches private sector bank growth. The lack of capital [for PSBs] therefore cannot be the culprit. Rather than an across-the-board shrinkage of public sector lending, there seems to be a shrinkage in certain areas of high credit exposure, specifically in loans to industry and to small enterprises. The more appropriate conclusion then is that PSBs were shrinking from exposure to infrastructure and industry risk right from early 2014 because of mounting distress on their past loans.

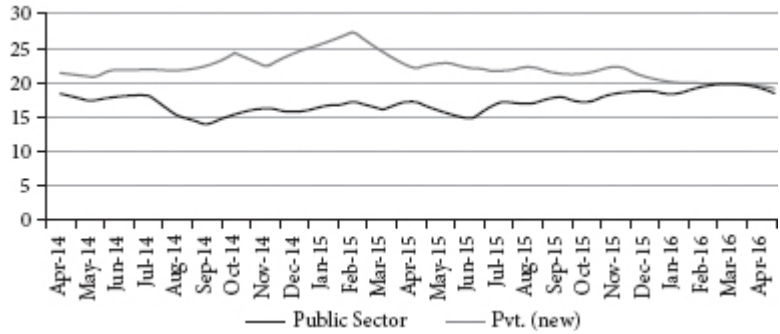
This isn't surprising, given that PSBs are carrying a huge amount of bad loans on their books due to lending to industry. As the old Hindi proverb goes, "*Doodh ka jala chaach bhi phook-phook kar peeta hai*" (Once bitten, twice shy).

Take a look at Figure 11.3(d), which plots the home loan lending growth of PSBs and new-generation private sector banks.

In this case, the lending growth of PSBs (the lower curve) is about as fast as the lending growth of the new-generation private sector banks (the upper curve). What all this tells us very clearly is that,

when it comes to the retail segment, PSBs are lending as much as they can. This refutes Chandan Mitra's point when he said that the middle class isn't borrowing and spending because of high interest rates. If the middle class weren't borrowing and spending, retail lending wouldn't have grown by close to 20 per cent in 2015-2016.

Figure 11.3(d): Growth in home loans over the past two years for both PSBs and private banks (in %).



Source: Reserve Bank of India.

Table 11.5: Types of bank retail lending between 2014 and 2016.

Type of Retail Lending	Growth in 2014-2015 (in %)	Growth in 2015-2016 (in %)
Consumer Durables	19.3	16
Housing	16.7	18.8
Loans against Fixed Deposits	−1.7	6.7
Loans to Individuals against Shares, Bonds, etc.	42.2	18.1
Credit Card Outstanding	22.6	23.7
Education	5.5	7.7
Vehicle Loans	17.2	22.7
Other Personal Loans	18.3	25.2

Source: Sectoral Deployment of Credit Data, RBI.

Take a look at Table 11.5. It shows the growth in the different types of retail lending. Other than loans to individuals against shares, bonds, etc. and loans to buy consumer durables, every other kind of lending has improved in 2015-2016 in comparison to 2014-2015.

Rajan summarised it best when he said:[653]

> These charts refute another argument made by those who do not look at the evidence – that stress in the corporate world is because of high interest rates. Interest rates set by private banks are usually equal or higher than rates set by PSBs. Yet their credit growth does not seem to have suffered. The logical conclusion, therefore, must be that it is not the level of interest rates that is the problem. Instead, stress is because of the loans already on PSBs' balance sheets, and their unwillingness to lend more to those sectors to which they have high exposure.

****

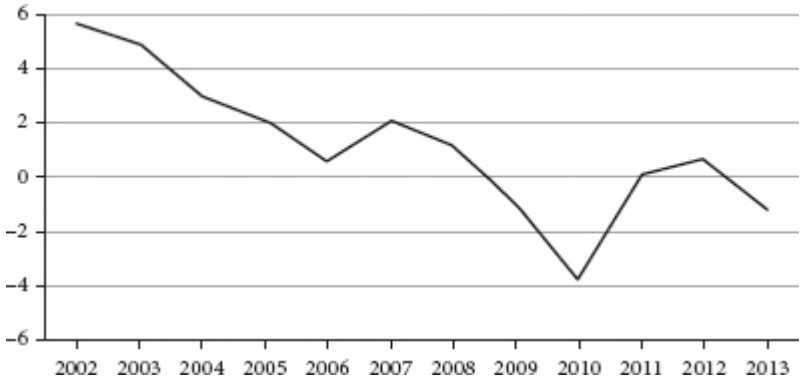
Another thing that needs to be pointed out here is that, after many years, the Indian saver is actually getting a real rate of return on his savings. This has happened primarily because the rate of interest offered on fixed deposits and other deposits is now higher than the rate of inflation.

As Rajan said in a June 2016 television interview: "When inflation was 9 per cent, they [i.e., depositors] were getting 9 per cent. This meant earning nothing in real terms and losing everything in inflation." Now the inflation is 5.5 per cent and the rate of interest is 7 per cent. This means that the depositors are finally able to make some real rate of return on their deposits.

This wasn't the case for many years. As Rajan explained in a June 2016 speech: "In the last decade, savers have experienced negative real rates over extended periods as CPI [inflation as measured by the consumer price index] has exceeded deposit interest rates. This means that whatever interest they get has been more than wiped out by the erosion in their principal's purchasing power due to inflation. Savers intuitively understand this, and had been shifting to investing in real assets like gold and real estate, and away from financial assets like deposits."[654]

Figure 11.4 clearly shows that, between 2008 and 2013, the real rate of return on deposits was largely negative. In fact, it was close to 4 per cent in the negative territory in 2010. The real rate of return on deposits is essentially the difference between the nominal rate of interest and the rate of inflation.

Figure 11.4: The average real rate of return on deposits (in %) between 2002 and 2013.



Source: Economic Survey of 2014-2015.

High inflation essentially ensured that India's gross domestic savings have been falling over the past decade. Between 2007-2008 and 2013-2014, the rate of inflation, as measured by the consumer price index, averaged around 9.5 per cent per year. In 2007-2008, the gross domestic savings peaked at 36.8 per cent of the GDP. Since then, they have been falling, and in 2013-2014, the gross domestic savings were at 30.5 per cent of the GDP, having improved from a low of 30.1 per cent of the GDP in 2012-2013.

This fall in gross domestic savings has come about because of a dramatic fall in household financial savings. Household financial savings is essentially a term used to refer to the money invested by individuals in fixed deposits, the small savings schemes of India Post, mutual funds, shares, insurance, provident and pension funds, etc. A major part of the household financial savings in India is held in the form of bank fixed deposits and post office small savings schemes.

Between 2005-2006 and 2007-2008, the average rate of household financial savings had stood at 11.6 per cent of the GDP. In 2009-2010, it rose to 12 per cent of the GDP. By 2011-2012, it had fallen to 7 per cent of the GDP. The household financial savings in 2014-2015 stood at 7.5 per cent of the GDP.

If a programme like *Make in India* has to take off, India's household financial savings, in particular, and overall gross domestic savings, in general, need to be on solid ground. And that is only going to happen if people are encouraged to save by ensuring that they make a real rate of return on their deposits. In fact, if India needs to grow at 10 per cent per year, an estimate suggests that the domestic savings rate would have to be around 41 per cent of the GDP.[655]

As Rakesh Mohan and Munish Kapoor of the International Monetary Fund write in a research paper titled 'Pressing the Indian Growth Accelerator: Policy Imperatives': "In the near future, we expect financial savings to be restored to the earlier 10 per cent level as inflation subsides, monetary conditions stabilise and households begin to obtain positive real interest rates on their deposits and other financial savings. Financial savings are then projected to increase gradually to around 13 per cent by 2027-2032."[656]

And how is this going to happen? As Mohan and Kapoor point out: "A sustained reduction in inflation that leads to the maintenance of low nominal interest rates, but positive real interest rates, will help in restoring corporate profitability while encouraging household savings towards financial instruments."[657]

Given this, it is safe to say that Rajan was absolutely on the right track with his interest rate policy. What India currently needs is a high-savings interest rate because, ultimately, these savings will translate into investments.

If *Make in India* manages to take off without the domestic savings rate going up from its current levels, then companies establishing industries would have to borrow from abroad, and this, beyond a certain level, has its own share of repercussions.

****

In August 2015, the government laid down the *Indradhanush* reforms, which was basically a plan to revamp the PSBs. The important features of the plan are as follows:

> a)The post of the Chairman and Managing Director of a PSB has been split. In the days to come, one individual will be appointed as MD and CEO of a bank and another as its non-executive chairman. This move was in line with the best global practices. Furthermore, individuals from the private sector are now allowed to apply for the posts of MD and CEO of PSBs which are vacant at that point of time.
>
> b)A Bank Board Bureau (BBB) has been set up. The BBB, it was said, would be a body of eminent professionals. The former Comptroller and Auditor General, Vinod Rai, has been appointed as its first head. Its job is to appoint the whole-time directors as well as the non-executive chairmen of the PSBs.

Furthermore, the BBB is also expected to "constantly engage with the Board of Directors of all the PSBs to formulate appropriate strategies for their growth and development".[658] The BBB started to function from April 1, 2016.

c)The government also planned to infuse more capital into the PSBs. As the *Indradhanush Document* pointed out: "If we exclude the internal profit generation which is going to be available to PSBs (based on the estimate of average profit of the last three years), the capital requirement of extra capital for the next four years up to FY 2019 is likely to be about Rs. 1,80,000 crore."

Of this, the government planned to pump in Rs. 70,000 crore (see Table 11.6). The remaining Rs. 1,10,000 crore the banks will have to raise from the market on their own. As I write this, in early July 2016, the PSBs are clearly not in a position to raise this kind of money on their own from the financial markets. The good bit is that the government has linked some part of the recapitalisation to the performance of the banks.

What is interesting is that the government's estimate of the amount of capital needed by the banks over the next few years is much lower than other estimates that have been made.

Table 11.6: Current and projected Indradhanush capital requirements.

Year	Amount (in Rs. crore)
2015-2016	25,000
2016-2017	25,000
2017-2018	10,000
2018-2019	10,000

Source: *Indradhanush Document*, Ministry of Finance.

As mentioned earlier, the PJ Nayak Committee thinks that banks will need a capital of Rs. 5.87 lakh crore. The Committee further assumes that, if the government puts in 60 per cent of the amount, then it would need Rs. 3.5 lakh crore.

Another estimate, made by Viral Acharya, of the Stern School of Business, and Krishnamurthy V Subramanian, of the Indian School of Business, in a research paper titled 'State

intervention in banking: The relative health of Indian public sector and private sector banks', suggests higher numbers. The professors come up with three scenarios. In what they call the extremely prudent scenario, they feel that the PSBs would require around Rs. 9,97,400 crore of capital. In the less prudent scenario, banks would need Rs. 6,53,300 crore of capital. In the least prudent scenario, banks would need Rs. 5,12,300 crore of capital.[659]

Let's compare these figures with the market capitalisation of the listed PSBs as on July 7, 2016, i.e., on the day I am writing this. (Some of the smaller PSBs are not listed. But this won't make any material difference to the overall result.) The total market capitalisation of the PSBs is around Rs. 3,66,500 crore.

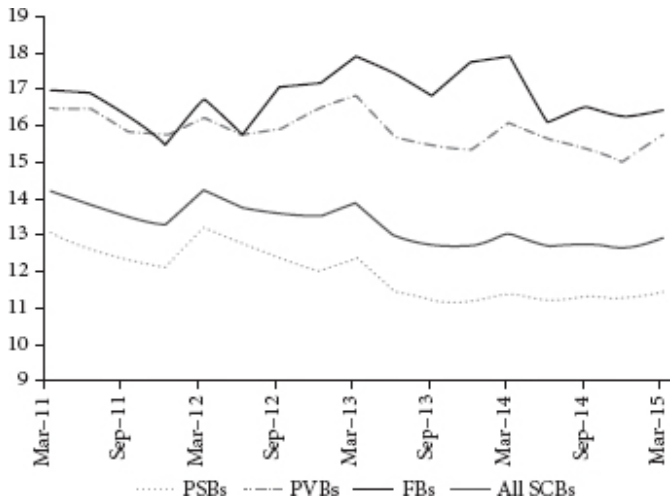
This means that the amount of capital required under the three different projected scenarios comes out to 2.7 times, 1.8 times and 1.4 times, respectively, of the total market capitalisation of the PSBs. What this clearly tells us is that a lot of money will be required in order to recapitalise the PSBs. Interestingly, as far as the new-generation private sector banks go, the capital required by them in the three scenarios comes out to Rs. 9,540 crore, Rs. 4,980 crore and Rs. 1,350 crore, respectively. This tells us very clearly that the new-generation private sector banks are much better capitalised than their public sector counterparts.[660]

It also shows us very clearly another negative impact of Big Government. In fact, the total amount of capital that PSBs have had against their risk-weighted assets has been falling over the years. Banks need to maintain some capital against the lending that they carry out. Different kinds of lending have different levels of associated risk: like lending to the government has zero risk, and hence, banks do not need to maintain any capital against the government bonds they buy. On the other hand, lending to a real estate company is deemed to be significantly risky, and the banks need to maintain some capital against this lending. This is essentially to make sure that the banks have an adequate amount of capital against the lending that they carry out. Hence, the capital-to-risk-weighted-assets ratio is also referred to as the capital adequacy ratio.

Figure 11.5 shows very clearly that, until March 2015, the capital-to-risk-weighted-assets ratio of the PSBs had been falling (the bottom most curve). As of March 2015, the ratio was under 12 per cent. In March 2016, the ratio was at 11.6 per cent. In comparison, the ratio for the private sector banks was at 15.7 per cent.

The capital adequacy ratio for PSBs has fallen over the years primarily because of the bad loans that they have accumulated. Some of these bad loans have been settled against the capital that the banks have, and this has led to the overall ratio falling. The ratio would have fallen even more if the government hadn't put a significant amount of money into these banks. Between September 2009 and August 2016, the government invested close to Rs. 1,25,000 crore in the PSBs. This is a significant amount of money. Despite this investment, the capital adequacy ratio of the PSBs has come down.

Figure 11.5: The capital adequacy ratio of banks between March 2011 and March 2015 (in %).



Source: RBI Financial Stability Report.
PSBs = Public Sector Banks. PVBs = Private Banks. FBs = Foreign Banks. SCBs = Scheduled Commercial Banks.

As per the RBI norms, banks need to maintain a capital adequacy ratio of at least 9 per cent. Hence, on an average, the PSBs are above the level that is deemed to be safe. Nevertheless, if banks have to take some risks while lending, they prefer to keep their capital adequacy ratio at about 5

per cent (or 500 basis points) above the level deemed to be safe by the regulator. This, in the Indian case, means a capital adequacy ratio of 14 per cent.[661]

The PSBs are nowhere near that level. In fact, the top three PSBs by assets, the State Bank of India, the Bank of Baroda and Punjab National Bank, had capital adequacy ratios of 13.1 per cent, 13.2 per cent and 11.2 per cent, respectively, as on March 31, 2016.

Over and above the bad loans eating into the capital of PSBs, the Basel III norms come into force from 2019. Basel is a small town in Switzerland where the countries of the world come together to decide the amount of capital that banks should be holding against their assets. The Basel III norms mandate more capital to be held against banks' assets in comparison to the Basel II norms.

Also, it needs to be mentioned here that governments usually tend to underestimate their future expenditure. Hence, the *Indradhanush* estimate of Rs. 1,80,000 crore of capital being required by PSBs will also likely turn out to be off the mark. The amount of capital required by the PSBs will be more if they need to be in line with the Basel III norms.

Furthermore, if the government wants to continue owning the PSBs, it will have to spend a huge amount of money in the years to come. Prudence demands that the government let the banks raise the capital from the market and, in the process, dilute its stake in these banks.

If the government tries to keep its stake in the PSBs at its current levels, the chances are that it will end up running a huge fiscal deficit in the years to come. This will have repercussions which will not be good for the health of the Indian economy.

d)The *Indradhanush* reforms also talked about taking several steps to destress PSBs from the bad loans that they were carrying, particularly those of infrastructure companies. One of the points suggested was that "promoters be asked to bring in additional equity in an attempt to address the worsening leverage ratio of these projects". If the promoters are unable to bring in fresh capital (i.e., equity) to bring down the leverage

(i.e., the debt-to-equity ratio, basically), then the PSBs "would consider viable options for substitution or taking over management control".

e)The *Indradhanush* reforms also pointed out a few things that the RBI had been doing to tackle the bad loans issue of PSBs. One of things pointed out was the new category of borrowers called the non-cooperative borrower. "A non-cooperative borrower is a borrower who does not provide information on its finances to the banks. Banks will have to do higher provisioning if they give fresh loan[s] to such a borrower," the *Indradhanush* document pointed out.

f)Furthermore, the government has decided to set up six new Debt-Recovery Tribunals (DRTs) for the faster recovery of bad loans. This is an important move, given that the current DRTs have a huge backlog of cases. In 2013-2014, the amount recovered from cases decided by the DRTs had stood at Rs. 30,590 crore. The debt that was sought to be recovered had stood at Rs. 2,36,600 crore. Hence, the recovery rate was a measly 13 per cent.[662]

> Also, the law indicates that cases brought to the DRT should be decided upon within six months. Nevertheless, only one in four cases pending before the DRT at the beginning of any year is decided upon during the course of that year. This suggests that it could take four years to clear all cases, if the DRTs just concentrated on old cases. In fact, in 2013-2014, the number of cases filed during the course of the year was one and a half times the number of cases decided upon during the course of the year.[663]

Hence, the country clearly needs more DRTs. It also needs more judges than the existing ones if the debt-recovery mechanism has to work at a faster pace. In fact, the DRTs were set up under the Recovery of Debts Due to Banks and Financial Institutions (RDDBFI) Act of 1993. This was done in order to help banks to recover "their dues speedily without being subject to the lengthy procedures of usual civil courts".[664]

Interestingly, the Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interests (SARFAESI) Act of 2002

has enabled banks to recover bad loans without even having to approach the DRTs. But as Rajan said in a November 2014 speech:[665]

> The SARFAESI Act of 2002 is, by the standards of most countries, very pro-creditor as it is written. This was probably an attempt by legislators to reduce the burden on DRTs and force promoters to pay. But its full force is felt by the small entrepreneur, who does not have the wherewithal to hire expensive lawyers or move the courts, even while the influential promoter once again escapes its rigour. The small entrepreneur's assets are repossessed quickly and sold, extinguishing many a promising business that could do with a little support from bankers.

While the *Indradhanush* reforms were better than the government doing nothing, yet they did not tackle four basic issues. First, *Indradhanush* had nothing to say about the evergreening of balance sheets carried out by banks. This, as mentioned earlier in the chapter, was done through the route of banks restructuring loans and, in the process, postponing the process of the recognition of bad loans. The Nayak Committee had suggested that penalties be imposed if significant evergreening is detected.[666]

Indradhanush did not come up with any groundbreaking reform. Its core theme was the recapitalisation of banks. Nevertheless, rather surprisingly, it didn't have anything to say about the bad loans that PSBs have accumulated over the years. As Rajiv Kumar, Geetima Das Krishna and Sakshi Bhardwaj write in a research paper titled 'Indradhanush— Banking Sector Reforms': "A framework for tackling NPAs is absent in Indradhanush." They further point out that bad loans had accumulated partly due to "the manner in which these banks operate".[667]

The second issue is the ability of the PSBs to recover bad loans from promoters who have defaulted. Rajan's above-cited speech tells us that the PSBs haven't been able to recover much, especially when it comes to large and influential promoters.

What do the numbers look like on this front? Let's first take the case of the State Bank of India. As of April 1, 2015, the bank had Rs. 56,725 crore of bad loans, or gross NPAs. During the course of the year, Rs. 4,389 crore of bad loans was recovered. At the same time, the bank wrote off Rs. 15,763 crore of bad loans. The loans written off would no longer be a part of the balance sheet of the bank, even though they could be recovered in the future.

As we can see in case of the State Bank of India, the total amount of the loans written off during the year was more than three times the

total amount of the loans recovered. That tells us the sad state of the loan recovery process. There were also fresh bad loans that were added to the balance sheet of the bank during the course of the year, and by March 31, 2016, the total bad loans of the bank had slipped to Rs. 98,173 crore.[668]

In fact, the scene wasn't much different in 2014-2015, when SBI wrote off loans worth Rs. 21,313 crore and managed to recover loans worth Rs. 9,235 crore.

How do things look for the Bank of Baroda, the second largest PSB by assets? As of April 1, 2015, the bad loans of the bank had stood at Rs. 16,261 crore. During the course of the year, the bank managed to recover bad loans worth Rs. 1,481 crore. At the same time, it wrote off bad loans worth Rs. 1,554 crore. It saw fresh slippages worth Rs. 26,833 crore, and ended up with total bad loans worth Rs. 40,521 crore by March 31, 2016.[669]

Punjab National Bank, the third largest PSB, saw a similar trend. As on April 1, 2015, the total bad loans of the bank had stood at Rs. 25,695 crore. The bank recovered loans worth Rs. 4,262 crore. It wrote off loans worth Rs. 6,485 crore, saw fresh slippages worth Rs. 41,060 crore, and ended the year with bad loans worth Rs. 55,818 crore.[670]

In fact, as we can see from the following table, for each of the past four years, the write-offs have been greater than the recovery of loans. This tells us that banks have a limited ability to recover the loans that have been defaulted on.

Table 11.7: Write-offs versus recoveries for all PSBs over the past four years.

Year	Write-Offs (in Rs. crore)	Recoveries (in Rs. crore)
2015-2016	59,547	39,534
2014-2015	52,542	41,236
2013-2014	34,409	33,698
2012-2013	27,231	19,832

Source: Reserve Bank of India.

The hope is that the PSBs will be able to force defaulting corporate promoters to sell their assets to repay their loans. Take the example of JP Associates selling its cement business to Ultra Tech for over Rs. 16,000 crore after pressure from banks to bring down its debt

burden.[671] Videocon Industries has sold two telecom circles to Idea Cellular.[672] The company has also sold its stake in the Mozambique gas fields for Rs. 15,000 crore.

The GMR Group has already offloaded stakes worth more than Rs. 11,000 crore in its roads, power as well as coal assets over the last two years. The Lanco Group has sold its Udupi plant for Rs. 6,300 crore.[673]

Hence, corporates who have defaulted on loans are being forced to sell their assets. The question is whether this strategy will work out on the whole. Also, this will need some patience on the part of the government to allow the market to do its work and clean up the Augean stables of bad loans.

Having said that, the *Indradhanush* reforms did nothing to tackle the issue of Big Government in PSBs. And this is the third issue that the reforms did not tackle.

The PSBs have dual regulators—the RBI as well as the Ministry of Finance. In fact, just between October 2012 and January 2014, the government issued 82 circulars to PSBs, leaving very little degree of autonomy to them.[674]

In May 2014, the Committee to Review Governance of the Boards of Banks in India (the PJ Nayak Committee) had submitted a detailed report on reforming the PSBs in India.

As the report submitted by the PJ Nayak Committee pointed out:

> Governance difficulties in PSBs arise from several externally imposed constraints. These include dual regulation, by the Finance Ministry in addition to the RBI; board constitution, wherein it is difficult to categorise any director as independent; significant and widening compensation differences with private sector banks, leading to the erosion of specialist skills; external vigilance enforcement though the CVC (Central Vigilance Commission) and CBI (Central Bureau of Investigation); and limited applicability of the RTI Act. A more level playing field with private sector banks is desirable.

The Committee had also proposed a solution to these problems. As it said: “If the Government stake in these banks were to reduce to less than 50 per cent, together with certain other executive measures taken, all these external constraints would disappear. This would be a beneficial trade-off for the Government, because it would continue to be the dominant shareholder and, without its control [on] banks diminishing, it would create the conditions for its banks to compete more successfully. *It is a fundamental irony that presently the Government disadvantages the very banks it has invested in* [emphasis

added].”

The Nayak Committee had proposed that the government’s stake in PSBs be moved to a Bank Investment Company, registered under the Companies Act. It had proposed that the Bank Investment Company should bring down its stake in the PSBs to less than 50 per cent.

In such a situation, the dual regulation of the PSBs would disappear, and the RBI would be the sole regulator of these banks. Furthermore, this would ensure that the PSBs have the ability to offer a competitive compensation structure which is in line with that of private banks. While the compensation structure of PSBs at lower levels is extremely competitive with that of private sector banks, the same cannot be said for the middle and upper levels, where the private sector banks offer employee stock option plans.

A government stake of below 50 per cent would also ensure that banks would be free from the external vigilance of the CVC as well as the RTI Act. The Committee had also recommended that the government should resist from issuing any instructions that are applicable only to PSBs.[675]

Fourthly, there is nothing in the *Indradhanush* framework which talks about either privatisation or the government bringing down its stake in PSBs to lower levels. The Modi government, like the previous Manmohan Singh government, wants to continue owning 27 PSBs. Also, by wanting to own 27 PSBs, the government has gone totally against the ‘minimum government-maximum governance’ philosophy that Narendra Modi had espoused in the run-up to the 2014 Lok Sabha elections.

The Nayak Committee had also proposed that the government follow the Axis Bank model, wherein the government is an investor rather than the promoter. “The CEO is appointed by the bank’s board, and because the bank was licensed in the private sector, it sets its own employee compensation, ensures its own vigilance enforcement (rather than being under the jurisdiction of the Central Vigilance Commission), and is not subject to the Right to Information Act.”

The Axis Bank model could be a good model to follow. If the government ends up with a minority stake in many PSBs, the chances are that even that minority stake would be worth more than what its majority stake is worth currently.

One logical reason for the government continuing to own banks is that the government needs to implement its social agenda as well, especially with schemes like Jan Dhan Yojana as well as cash payments being directly made into bank accounts. Nevertheless, the question remains as to why the government needs to own 27 banks for that. Owning four or five of the biggest banks would help implement its social agenda adequately.

Also, with the government continuing to own so many banks, the danger of the principal-agent problem having an impact on the performance of the PSBs continues to remain. Any reform which just tackles the current situation without doing anything about future possibilities is not really a reform.

In fact, this is not the first time that the government is bailing out the PSBs. This is the third time in the last twenty-five years that the government has grappled with PSBs loaded with stressed assets and bad loans. In the past, it had done the same in 1993 and 2001.

In fact, between 1993 and 1995, the government pumped in Rs. 10,987 crore into the PSBs for recapitalisation.[676] This was when the gross non-performing assets of banks had reached 11.8 per cent of the total assets.

One argument that is made is that the amount of money that India has spent on recapitalising PSBs over the past three decades is one of the lowest in the world. In fact, the government has recovered more than the money invested through recapitalisation by the increase in market capitalisation of these banks. While this is a valid point, it does not take into account the fact that the money that went towards recapitalisation was money that was taken away from something else which may have been more important. It also does not take into account the opportunity costs of the market capitalisation that these banks could have achieved if the government had stopped meddling in them as much as it did.

Furthermore, three banking crises in 25 years clearly tell us that there is something very wrong with the way PSBs are operated. And the problem is the state, i.e., Big Government. So, when we know this, why not do something about it rather than come up with half-baked reasons in favour of the government having to put in more money into these banks?

Given this, now is the time to tackle the Big Government issue that

is holding the PSBs back and has been costing the government as well. As the Economic Survey of 2014-2015 rightly points out: "When the next boom and bust comes around, India needs to be better prepared to distribute pain between promoters, creditors, consumers and taxpayers. Being prepared for the clean-up is as important as being prudent in the run-up."

In fact, the 1991 Committee on the Financial System (better known as the first Narasimham Committee; M Narasimham was a former Governor of the RBI) had suggested that the duality of control over the banking system by the Ministry of Finance and the RBI be ended. This was recommended 25 years ago. The 1997 Committee on Banking Sector Reforms (better known as the second Narasimham Committee) had recommended that the government reduce its holdings in PSBs to 33 per cent and, in the process, give increased autonomy to these banks. The Committee had also recommended no further recapitalisation of PSBs by the government. But that is not how things have eventually turned out.

Another solution that has been offered is that the government can merge these banks and continue to own a few big banks. This has already been set in motion in June 2016, with the union cabinet clearing the merger of six banks (State Bank of Bikaner and Jaipur, State Bank of Hyderabad, State Bank of Mysore, State Bank of Patiala, State Bank of Travancore, and Bharatiya Mahila Bank Ltd.) with the SBI.

While merging subsidiary banks with the SBI is one thing, the same cannot be said about merging other banks. As R Gandhi, Deputy Governor of the RBI, said in an April 2016 speech:

> PSBs as a group have not been performing well during the last few years. There has been a large increase in Non-Performing Assets (NPAs). As a part of managing large NPAs, some suggestions have been made: that perhaps a consolidation of PSBs can render them more capable of managing such challenges relatively better…. [The] merger of a weak bank with a strong bank may make [the] combined entity weak if the merger process is not handled properly. The problems of capital shortages and higher NPAs may get transmitted to [the] stronger bank due to [undue] haste or a mechanical merger process.

This is something that the government needs to keep in mind before taking any such decision. Bringing two banks which have their own sets of problems together won't make those problems go away. It could, instead, compound them.

[xvii] TARP, or Troubled Assets Relief Program, was a programme launched by the United States government in the aftermath of the current financial crisis, which started in September 2008. The programme was launched in October 2008 to rescue the US financial institutions which were in major trouble. In this case, the Morgan Stanley analysts play on the acronym TARP and suggest that the Indian banks also need a TARP-like government rescue programme.

12. THE BIGGEST GOVERNMENT

SUBSIDY

> Nothing is so permanent as a temporary government programme.
>
> – Milton Friedman[677]

In April 2016, the Bombay High Court ruled that some cricket matches of the Indian Premier League (IPL) T20 (Twenty-Twenty) cricket tournament should be moved out of the state of Maharashtra.

This decision basically led to thirteen matches that were scheduled to be played in the state between May 1, 2016 and May 29, 2016 (when the tournament was to end) being moved out of the state. This was done so as to save the water that would otherwise have been used to water the cricket pitches and grounds on which matches were scheduled to be held in Mumbai, Pune and Nagpur.

Many parts of Maharashtra were in the midst of a drought, with the monsoon having failed for the previous two years. In this environment, it wasn't deemed to be fair to be wasting water on something as silly as a twenty-overs-a-side cricket tournament.

When it came to the lack of access to water, one of the most badly affected towns in Maharashtra was Latur. It was said that when Latur did not have access to water, it wasn't fair that the IPL end up using six million litres of water to hold the cricket tournament in the state.

The international pitch maintenance guidelines state that three lakh litres of water need to be used to water a ground. Given that 20 matches had been scheduled in Maharashtra, this would have meant around six million litres (3 lakh litres per match multiplied by 20) of water being used up.[678] The BCCI told the Court that the watering of a ground for IPL matches wasn't the same as at the international level. This meant that a lesser amount of water would be used to water the grounds. But this argument did not convince the Court, and it called for all the matches scheduled in the state after April 30, 2016 to be moved out of the state.

This was a classic case of a scapegoat being found and the real 'culprit' going scot-free. The daily requirement of water in Latur was around 85 litres per person.[679] The population of the Latur district, as

per the 2011 census, was 24.6 lakh, or 2.46 million. This meant that the daily requirement of Latur was around 209.1 million litres of water (85 litres multiplied by 2.46 million).

The IPL cricket tournament was scheduled to last for a period of 51 days. This meant that, over that period, Latur would have needed around 10,664 million litres of water (209.1 million litres daily multiplied by 51 days). During the same period, the IPL would have used up around six million litres of water.

Hence, by not allowing the IPL to happen in Maharashtra, the water thus saved was good enough to meet the water needs of Latur for 0.029 days (6 million litres of water expressed as a proportion of 209.1 million litres of water). This essentially meant that, by not allowing the IPL to happen in Maharashtra, the total water saved was good enough to meet the water needs of Latur for 42 minutes (0.029 days $\times$ 24 $\times$ 60). Of course, this comes with the assumption that all the water saved could have been moved to Latur.

Then there is the case of water leakages. Take the case of the water being supplied to Mumbai. Figures from the Brihanmumbai Municipal Corporation suggest that the city loses anywhere between 900 to 1,000 million litres of water daily to leakage and theft.[680] The city loses nearly one-fourth of the water supplied to it due to leakage. Now compare the six million litres of water which would have been used for the entire IPL season with the 900-1,000 million litres of water that is lost daily due to leakage.

The point being that getting the IPL involved in the entire water scarcity debate basically diverted attention from the real reasons behind the scarcity of water in Maharashtra. The two failed monsoons were mainly responsible for the scarcity, but there were other major reasons as well which were not acknowledged.

****

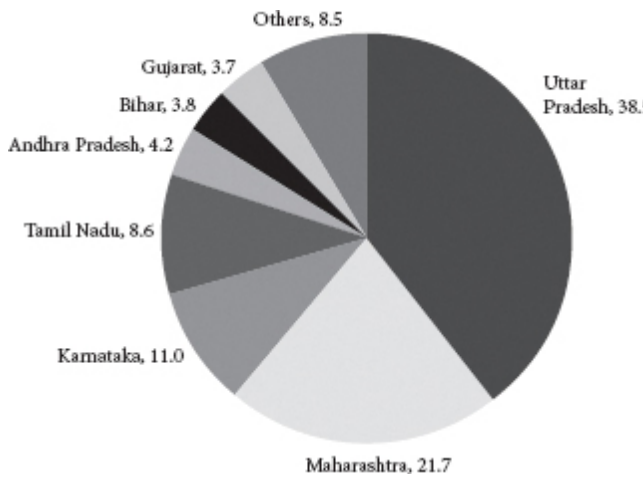
Sugarcane used to be largely grown in Uttar Pradesh and Bihar. This made sense, given that it is a water-intensive crop. But, gradually, licences were given on priority for the establishment of sugar factories run by cooperatives which had their roots in Western India.[681] These cooperatives were largely in Maharashtra.

Over the years, Maharashtra has become the second largest producer of sugarcane in India, after Uttar Pradesh, and the largest

producer of sugar. Uttar Pradesh is the largest producer of sugarcane in India and produces 38.5 per cent of the total output. Maharashtra comes in second at 21.7 per cent. But the state produces 33.7 per cent of the total sugar produced in the country, against the 27.3 per cent produced by Uttar Pradesh (see Figures 12.1(a) and 12.1(b)). This is primarily because Maharashtra has the highest recovery rate of sugar from sugarcane.

Despite this, the question is whether a state like Maharashtra (actually Western Maharashtra) should be growing sugarcane, given that it is a water-scarce area. Sugarcane is grown on 4 per cent of the total cropped area in the state. Nevertheless, it ends up using 70 per cent of the irrigation water in the state.[682] As the Economic Survey of 2015-2016 points out: "In water-scarce Maharashtra, all sugarcane is grown on irrigated land."[683]

Figure 12.1(a): State-wise contribution towards sugarcane growing in India.



Source: *The Price Policy for Sugarcane: The 2016-17 Sugar Season*.

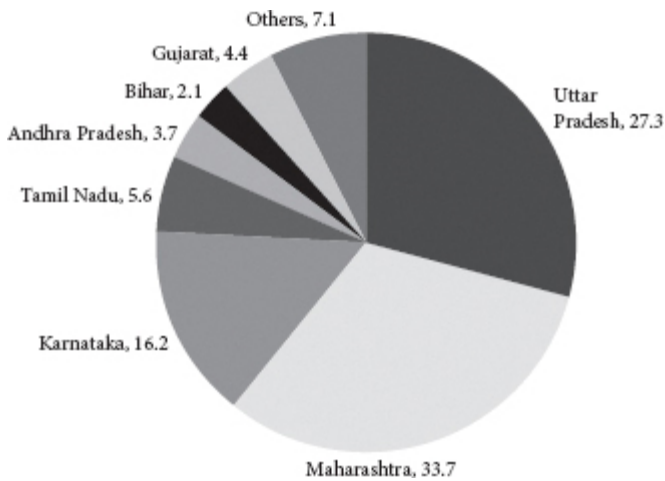
Given that water is not correctly priced anywhere in India, the sugarcane and, as a result, the sugar being produced are not rightly priced either. If the sugarcane farmers of Maharashtra actually paid for the water that they consume, Maharashtra would not be producing as much sugarcane and sugar as it currently is.

But suggesting anything like this is unlikely to go down well with the politicians of Maharashtra, given that many of them have built a career around this and also indirectly run the sugar mills owned by the cooperatives.

In fact, the amount of water used to produce a kilogram of sugar in Maharashtra and the southern states is significantly more than that in Bihar and Uttar Pradesh, the other primary growers of sugarcane and producers of sugar.

When it comes to the usage of water, Bihar is the most efficient, and uses 812 litres of water to produce a kilogram of sugar. Uttar Pradesh comes in next, and uses 1,049 litres of water. The states of Maharashtra, the erstwhile Andhra Pradesh and Tamil Nadu use 2,104 litres, 2,234 litres and 2,245 litres, respectively.[684] Hence, these states use 1,300-1,400 litres of water more to produce every kilogram of sugar than Bihar does.

Figure 12.1(b): State-wise contribution towards sugar production in India.[xviii]



Source: *The Price Policy for Sugarcane: The 2016-17 Sugar Season*.

While the water productivity figures of Andhra Pradesh and Tamil Nadu are worse than those of Maharashtra, yet they produce only 3.7 per cent and 5.6 per cent of the sugar produced in the country. Meanwhile, the state of Maharashtra produces more than one-third of the sugar produced in the country.

In 2014-2015, India produced 28.2 million tonnes of sugar. Of this, Maharashtra produced 10.5 million tonnes. These data points have been taken from a report titled *The Price Policy for Sugarcane: The 2016-17 Sugar Season*. As per these data points, Maharashtra produces around 37.3 per cent of the sugar produced in the country. As per Figure 12.1(b) (taken from the same source), Maharashtra produces 33.7 per cent of India's sugar production.

So there is some disconnect here in the figures. But it's safe to say that Maharashtra produces more than one-third of India's sugar. The state produced 10.5 million tonnes of sugar in 2014-2015. It needs 2,104 litres of water to produce one kilogram of sugar. So what is the total amount of water that the state would use in order to produce its yearly yield? The state needs 22.1 trillion litres of water to produce this amount of sugar.

Now compare this to the six million litres of water that would have been used if all the scheduled IPL matches had taken place in the state. This works out to 0.000028 per cent of the water used for producing sugarcane, which, in the larger scheme of things, is almost zero. The larger point here is that the IPL had no role to play in causing a water shortage in the state of Maharashtra. Nor did moving it away from the state save any significant amount of water. But in an environment where tempers were running high, basic logic was thrown by the wayside and a scapegoat had to be found. The IPL became one.

One of the major reasons for the water shortage in Maharashtra is the fact that it grows sugarcane when it shouldn't. Estimates suggest that the drought-prone districts grow around four-fifths of the sugarcane produced in the state.[685]

What is of great interest to us is that Big Government has played a huge role in Maharashtra becoming India's top sugar-producing state — first, through the way in which licences were given to cooperatives to produce sugar, and second, through the help given in setting up sugar mills.

Until 2002-2003, the government of Maharashtra contributed up to 75 per cent of the capital required for any cooperative sugar mill. The mill was typically funded through 40 per cent equity and 60 per cent debt. Other than contributing up to 75 per cent of the equity, the government also guaranteed the loans that the cooperative mill took on from financial institutions. This essentially led to a situation wherein farmer-members had to contribute only around one-tenth of the cost of the project. Furthermore, the government's contribution to the equity capital was recovered in an indirect way by deducting a portion of the sugarcane price payable to the farmers over a period of time.[686]

This led to a proliferation of sugar mills in the state. Most of these cooperative mills were put together by politicians.

This assistance by Big Government stopped in 2002-2003, after the sugar prices crashed. The crash in sugar prices led to the cooperative sugar mills defaulting on their loans. This led to the financial institutions which had given loans to these mills invoking their government guarantees.[687]

But by then the damage had already been done. Way too many sugar mills had been set up in parts of Maharashtra which simply did not, and still do not, have enough water to exploit. As the document titled *The Price Policy for Sugarcane: The 2016-17 Sugar Season* points out:

> This [i.e., production of sugarcane] leads to massive inequity in the use of water within the state. [The] future growth of cane in Maharashtra is likely to be severely hampered by scarce water supplies, unless much of [the] sugarcane is put on drip irrigation or varieties are evolved that use less water. Ensuring economy in water use needs to sink into the consciousness of policy-makers at the Centre and in the states so as to achieve the optimum production of sugar per drop of water.

Given this, it makes immense sense to move the production of sugarcane from Maharashtra and the southern states to Bihar and Uttar Pradesh, where it is most efficiently grown once the water needed to grow it is taken into account. This can happen only if water is appropriately priced and, over and above this, investments are made in Uttar Pradesh and Bihar. This becomes even more crucial once one considers the fact that the International Water Resources Group has projected that India would be 50 per cent short of water by 2030.[688]

Hence, it is important that sugarcane be grown in the right areas. As the document titled *The Price Policy for Sugarcane: The 2015-16 Sugar Season* points out:

> "Given that sugarcane is a water-guzzling crop, its long-term development must ensure that it is in line with [the] availability of sufficient water and its cost. A crude, back of the envelop calculation shows that bringing irrigation water through major and medium irrigation schemes or through borewells in states like Maharashtra and Tamil Nadu cost[s] more than two to three times higher than in, say, Bihar or even eastern Uttar Pradesh. Since [the] real cost of water in Maharashtra, Andhra Pradesh and Tamil Nadu is much higher than in Bihar and UP, it raises an issue of comparative advantage. If this cost… is incorporated… [while] calculating [the] productivity of sugar, the difference in sugarcane yields will be so high that Bihar and Uttar Pradesh would turn out to be the most efficient producers of sugar per unit cost of water, adjusted for time duration and recovery."

Furthermore, this is not the only way in which Big Government has essentially played spoilsport in the production of sugarcane.

****

Every year, the central government declares a Fair and Remunerative Price (FRP) for sugarcane. This is done under the Sugarcane (Control) Order (1966), which was issued under the Essential Commodities Act of 1955.

As Clause 3(1) of the Sugarcane (Control) Order of 1966 points out: "The Central Government may, after consultation with the authorities, bodies or associations as it may deem fit by notification in the official Gazette, from time to time, fix the Fair and Remunerative Price of sugarcane to be paid by producers of sugar or their agents for the sugarcane purchased by them, having regard to:

a)the cost of production of sugarcane;

b)the return to the grower from alternative crops and the general trend of prices of agricultural commodities;

c)the availability of sugar to the consumers at a fair price;

d)the price at which the sugar produced from sugarcane is sold by producers of the sugar;

e)the recovery of sugar from sugarcane; f) reasonable margins for growers of sugarcane on account of risk and profits."

What this tells us is that the process of deciding on the FRP for sugarcane is well laid out. It takes several factors, including the price of the sugar (which is made from the sugarcane), into account. The FRP set by the central government is the minimum price below which sugar factories cannot buy sugarcane from the sugarcane farmers.

Of course, this was done in order to ensure that the farmers don't get taken for a ride by the *big bad capitalists* who run sugar mills. Big Government mandated that the sugar mills buy sugarcane at a minimum price. To add to the FRP decided by the central government, the state governments came up with the State Advised Price (SAP). Over the years, the SAP fixed by the state governments has been fixed way above the FRP and, at times, has no relation to the price of sugar, the main end-product of sugarcane.

The state governments offer different reasons for a higher SAP. These include higher cost of production and pressure to offer higher prices from farmers' groups.

Take the case of Maharashtra, the largest producer of sugar in the country. In 2010-2011, the FRP decided by the central government was Rs. 139 per quintal (one quintal equals 100 kg), at a recovery rate of 9.5 per cent. The SAP (first advance) offered by the Maharashtra government was Rs. 200 per quintal. In 2011-2012, the FRP was at Rs. 145 per quintal. The SAP varied between Rs. 180 and Rs. 205. In 2013-2014, the FRP was at Rs. 210 per quintal. The price offered by the Maharashtra government was Rs. 236 to Rs. 275 per quintal.[689]

The sugar mills in the state were expected to buy sugarcane from the farmer at these high prices fixed by the state government. Given this, the farmers (or should I say prospective farmers?) had a ready buyer, that too one who had to offer a high price. This essentially ensured that the production of sugarcane in Maharashtra doubled between 2005-2006, when it was at 5.2 million tonnes, and 2014-2015, when it was at 10.5 million tonnes. The only other state where the production more than doubled was Karnataka. The production in 2005-2006 was at around two million tonnes. By 2014-2015, it had jumped to around five million tonnes. The state also came up with a higher SAP between 2010-2011 and 2013-2014.

This increase in production is similar to the phenomenon seen in the case of rice and wheat (as we shall see later in the chapter), wherein the government sets a Minimum Support Price (MSP). The Food Corporation of India (FCI), along with other state procurement agencies, buys this rice and wheat directly from farmers. This has essentially led to a situation wherein the farmers are more interested in growing rice, wheat and sugarcane, and not pulses, fruits and vegetables.

As the Economic Survey of 2015-2016 points out: "While there is no government procurement *per se* in sugarcane, a crop with assured irrigation, mills are legally obligated to buy cane from farmers at prices fixed by [the] government, an effective MSP-like engagement…. Public procurement at [the] MSP has disproportionately focused on wheat, rice and sugarcane, and perhaps even at the expense of other crops such as pulses and oilseeds." We shall look at this phenomenon in greater detail later in the chapter.

The good part is that both Karnataka and Maharashtra have stopped offering a higher SAP to farmers since 2013-2014. For the two years since then, the SAP offered by the two state governments was equal to the FRP, at Rs. 220 per quintal and Rs. 230 per quintal, respectively.

But one state which continues with the practice is Uttar Pradesh. Between 2012-2013 and 2015-2016, the state offered an SAP of Rs. 280 per quintal, which was significantly more than the FRPs of Rs. 170 per quintal, Rs. 210 per quintal, Rs. 220 per quintal and Rs. 230 per quintal for the years 2012-2013, 2013-2014, 2014-2015 and 2015-2016, respectively. While, on the face of it, this seems like a farmer-friendly move, it clearly is not.

Like many other Big Government moves, it ends up hurting those it is supposed to benefit. Given the high SAP, which has no relation to the end price of the sugar being produced, many sugar mills take the sugarcane but do not pay the farmers immediately. This delay in payment is referred to as an arrear.

In 2014-2015, the total arrears had stood at Rs. 15,593 crore.[690] The state of Uttar Pradesh, the largest producer of sugarcane, accounts for nearly half of the arrears. This isn't surprising, given the huge difference between the FRP and the SAP set by the government of Uttar Pradesh.

Interestingly, the total arrears due to sugarcane farmers have been going up over the years (see Table 12.1). In 2009-2010, the arrears had stood at just Rs. 1,151 crore. Since then, they have jumped to Rs. 15,593 crore. Also, the economies of scale seem to work in reverse in this case.

Of the 519 sugar mills in operation during the course of 2015-2016, only 55 mills do not owe any amount to the sugarcane farmers. This basically means that close to 90 per cent of the mills haven't paid what they owe to the farmers. Furthermore, the thirty sugar mills which owe more than Rs. 100 crore to the farmers have a crushing capacity of close to 10,000 TCD (tonnes crushed per day). Now compare this to the mills which do not have any arrears. These 55 mills have a crushing capacity of around 300 TCD.[691]

Table 12.1: The total sugarcane arrears between 2009-2010 and 2014-2015.

Sr. No.	Sugar Season	Position as on	Total Amount Payable (in Rs. crore)	Amount Paid (in Rs. crore)	Arrears (in Rs. crore)	Arrears as a percentage of Total Amount Payable
1	2009-10	31.5.2010	37,529	36,378	1,151	3
2	2010-11	31.5.2011	42,295	40,099	2,196	5
3	2011-12	31.5.2012	49,761	44,637	5,124	10
4	2012-13	31.5.2013	58,541	50,662	7,879	13
5	2013-14	31.5.2014	55,910	41,815	14,095	25
6	2014-15	31.5.2015	65,113	49,520	15,593	24

Source: Directorate of Sugar, DFPD.

What good is a higher price if the farmer is not paid on time? As the document titled *The Price Policy for Sugarcane: The 2013-14 Sugar Season* points out:

> This is not a healthy state of affairs from the point of view of famers as well as industry, as it leads to increasing litigation in courts, wherein farmers ask for immediate payment of arrears and mills plead that given the low realisation from sugar and by-products, the SAP is too high and they cannot pay the SAP price without going in losses. And these litigations continue for years in the courts.

What this clearly tells us here is that Big Government fiddling with the sugar prices turns out to be a loss-incurring proposition for farmers. In an ideal world, when a mill does not pay a farmer on time, one would expect the farmer to offer the sugarcane that he produces to another mill the next year. But in the world of Big Government, things don't work that way.

****

In August 2012, the Lok Sabha MP Prataprao Ganpatrao Jadhav received an answer to a question he had put to the government. He had asked "whether the Government has imposed a ban on [the] issuance of new licences for [the] setting up of sugar mills in Maharashtra".

To this, the government answered: "[The] Sugar Industry has been de-licensed *vide* press note dated 31.08.1998, with which the requirement of a licence for setting up new sugar mills was dispensed with. The entrepreneurs are now free to set up new sugar mills at their preferred locations *subject to compliance of rules & regulations of the Central/State Governments* [emphasis added]."

The real answer to the question Jadhav was asking lies in the italicised part in the last paragraph. While the licensing regime for the setting up of a sugar mill may have been done away with, the rules, as they stand, make it almost impossible for an entrepreneur to set up a sugar mill at a location of his choice.

In July 1980, the central government fixed the minimum radial distance between two sugar mills at 30 kilometres. This was done in order to ensure that each mill had an adequate availability of sugarcane. In January 1997, this was increased to 40 kilometres. In January 2006, Clause 6A of the Sugarcane (Control) Order of 1966 was amended, and the minimum radial distance was reduced to 15 kilometres. Hence, as things stand as of now, no sugar factory can be set up within a 15 kilometre radius of an existing sugar factory.

Furthermore, the state governments, with the prior approval of the central government, can set a higher minimum radial distance between two sugar mills. The states of Punjab, Haryana and Maharashtra have made use of this provision and increased the minimum radial distance to 25 kilometres. The reasons offered for this vary, from decrease in the area under sugarcane production to the increase in crushing capacity of the existing sugar mills.[692]

This minimum distance criterion of 15-25 kilometres essentially ensures that an entrepreneur is really not free to start a sugar mill at a location of his choice. Other than this, the sugarcane farmers have to supply their produce to a specific sugar mill. The funny thing is that the farmers are supposed to sell their produce to that specific sugar mill, even if they haven't been paid their past dues. What does not help is that farmers are made to wait at the mill gates, sometimes for more than a few days. Farmers have also complained that the mills do not correctly weigh the sugarcane that they supply and that it is under-weighed by 10 to 20 per cent.[693]

The idea behind linking sugarcane farmers to specific sugar mills was that this would encourage the mills to carry out development work, leading to an increase in the sugarcane productivity. But that doesn't seem to have happened, with sugarcane productivity barely moving from 68 tonnes per hectare to 72 tonnes per hectare between 2009-2010 and 2014-2015.[694]

The people who came up with such rules essentially forgot what the lack of any competition can do to businesses. The way the system

is currently structured, it gives sugar mills no incentive to work efficiently. Come what may, the sugarcane farmer has to come back to them with his produce. Hence, the supply of raw material to manufacture sugar is guaranteed. If there had been some competition, then, if one mill did not pay up on time, the farmer would have had the option of going to another mill with his produce. But that cannot happen in this case. Also, if the farmer-mill matching system hadn't been there, it would have ensured greater flexibility to mills, depending on their crushing capacity, to enter into contracts with the farmers.[695]

This meddling by Big Government in the sugarcane and sugar market needs to end. There are multiple things that need to be done. The states need to end the SAP system that they have come up with. The central government needs to make it clear to the states that it won't keep rescuing them in order to be able to pay the accumulated arrears. In fact, the central government had to intervene in the sugar sector in both 2013-14 and 2014-15.[696]

As the document titled *The Price Policy for Sugarcane: The 2013-14 Sugar Season* points out: "If any state wants to give some extra support to its cane farmers, an investment subsidy or income support policy would be better, and not the price policy, which distorts the markets."

Furthermore, the radial distance stipulation for the setting up of a sugar mill and the matching of sugarcane farmers to mills both need to go. Only then will some semblance of competition be introduced into the system. Or, as *The Price Policy for Sugarcane: The 2016-17 Sugar Season* document points out: "To create healthy competition, both among farmers and millers, the Commission [for Agricultural Costs and Prices] recommends to dispense with cane area reservation to enable farmers to supply their cane to any mill. This will allow [the] Schumpeterian 'process of creative destruction' to work and [the] untenable situation of cane arrears to farmers will not arise."

When was the last time that you saw a reference to the economist Joseph Schumpeter and the 'process of creative destruction' in an Indian government document? But that is precisely what the sugar sector in India needs. The question is: Will something like this happen in the years to come?

Many sugar mills in India are controlled by politicians. The

politicians use these mills as a source of electoral funding as well. This is clearly brought out by the economist Sandip Sukhtankar in a research paper titled 'Sweetening the Deal? Political Connections and Sugar Mills in India'. As he writes:[697]

> The cane price falls by approximately Rs. 20 in politically controlled mills during election years. These drops translate to an economically significant drop in revenues of Rs. 60 lakh (US$ 135,000) per election year per mill. Evidence suggests that the profit decline is not due to effects on mill operations, but rather due to [the] appropriation of funds for electoral purposes…. From the perspective of farmers, this fall in prices could represent either pure theft by mill chairmen or indirect campaign contributions.

Hence, sugar mill owners pay low prices to sugarcane farmers during an election year so as to be able to funnel more money into the electoral campaigns of politicians. If creative destruction in the form of competition is unleashed in the sugar sector, politicians won't be able to use sugar mills as their cash cows to fight elections. This makes it very difficult to believe that any competition will be introduced into the sector in the time to come. Big Government will continue to rule.

****

In the case of sugarcane, the central government sets the FRP every year. This is the minimum price at which sugar mills have to buy sugarcane from farmers. Of course, as we have seen in the earlier sections, the system has been messed around with, with state governments offering their own SAP, which tends to be higher than the FRP.

Other than declaring the FRP for sugarcane ever year, the central government also declares the Minimum Support Price (MSP) for 23 other crops, including rice and wheat. While the government declares the MSP for 23 crops, it procures only rice, wheat and cotton directly from the farmers, using the FCI as well as state procurement agencies. In fact, 90 per cent of the procurement of rice and wheat is now carried out by the state procurement agencies.[698] Recently, the government has started to procure pulses as well, in the hopes of being able to control the rise in their prices.

It is interesting to see how the procurement of food (primarily rice and wheat) evolved in India. The British created the first granaries (called *golas*) in 1783-84. This was in response to a very long drought in North India at that point of time.[699]

In 1878, Lord Robert Lytton, the then Viceroy of India, established the policy on famine relief for the first time. Around that time, India also got its first Famine Insurance Fund. This basically involved setting aside money (and not foodgrains) to carry out famine relief measures. The hoarding of foodgrains was deemed as unadvisable by the Food Commission of 1880.[700]

In fact, the storage of foodgrains didn't happen until much later. In 1939, the British government ruling India introduced rationing in order to ensure an equitable distribution of foodgrains among urban consumers, so as to protect them from high inflation. In 1943, this led to the Foodgrains Policy Committee being appointed by the British government, formalising the first scheme towards the centralised purchase of foodgrains.[701]

At the same time, the Bengal Famine of 1942-1943, in which millions died, led to the establishment of the Food Department in December 1942. As the World Bank report titled *India Foodgrain Marketing Policies: Reforming to Meet Food Security Needs*, published in 1999, points out:[702]

> The Bengal Famine of 1943 was a major impetus for the formulation of a comprehensive food policy in India. Policy intervention in the foodgrain market was virtually absent till 1943. Free market forces were allowed to determine the prices of foodgrains. However, both internal and external forces often placed the economy in crisis. The consequences of the crises were severe since the nutrition intake levels of the poor were low even in normal periods. Weak integration of submarkets stifled market adjustments, causing local foodgrain shortages even though there was no shortage at the global level. Disruption of imports and the internal transport system during W.W. II [i.e., the Second World War] resulted in a near collapse of the free market system and led to the Bengal famine in 1943, in which more than a million people died of starvation. The situation was further worsened by the restrictions imposed by the surplus provincial governments on the movements of foodgrains outside their [respective] jurisdictions.

Government intervention in the food market thus started only after the Bengal famine of 1942-1943. As the World Bank report points out: "The Food Policy Committee set up after the famine emphasised the need for the active involvement of the Central Government in the management of the food economy in the country. The Foodgrains Policy Committee favoured government intervention in the foodgrain market and suggested a system in which a central agency would participate in the procurement and distribution of foodgrains parallel to the private trade."

In fact, between 1943 and 1947, administrative control, monopoly

procurement and public distribution became the order of the day. Around this time, the government started to import foodgrains and distribute them through ration shops. Foodgrain imports of two million tonnes per year helped meet a major part of the rationing requirements.[703] Interestingly, it is these ration shops which, over a period of time, would become what we now call the PDS (Public Distribution System) of more than five lakh fair price shops operating throughout the length and breadth of the country.

India's policy towards foodgrains after Independence was influenced by the way the British government handled things during the last few years before Independence. What did not help was the fact that, after the partition of the country into India and Pakistan, India inherited 82 per cent of the population but only three-fourths of the area under cereal production. Furthermore, India inherited only 69 per cent of the pre-Partition irrigated area. Also, before Partition, 24 per cent of the cropped area was irrigated. This dropped to 19 per cent after Partition.[704]

This basically led to a situation wherein government intervention in the food markets continued. After Independence, the foodgrain trade went through a cycle of control and decontrol, with the government issuing licences to curb private trade. In fact, the 1950s saw the government assume monopoly control over foodgrain movement between states. Nevertheless, in December 1953, Rafi Ahmed Kidwai, who became the Food Minister in 1952, introduced decontrol for both rice and wheat.[705]

But this situation did not remain for long, as supply bottlenecks started to show up from 1955 onwards. In 1954, the foodgrain production had stood at 72 million tonnes. This declined to 69 million tonnes by 1956 and 67 million tonnes by 1958. The fall in the production of food-grains led to a price rise of 11 per cent between 1956 and 1958.[706]

There were multiple repercussions of this. The buffer stock of foodgrains (or the stock of rice and wheat maintained by the government) in 1955 was reduced to 0.9 million tonnes. This led to the return of licensing of the foodgrain business. It also led to the enactment of the Essential Commodities Act of 1955.[707]

The shortage of foodgrains meant that the government went about

importing them and distributed them through the ration shops, or the PDS, as they had evolved into. The 1950s saw the extension of these shops even into the rural areas.[708] Until the mid-1960s, the government kept intervening in the foodgrain market, without really going about procuring foodgrains to build a buffer stock on a large scale. As the World Bank report points out: "Similarly, policy efforts on procurement were also minimal: foodgrain procurement per annum averaged 2.2 million tonnes in 1951-1955, 0.8 million tonnes in 1956-1960, and 14 million tonnes in 1961-1965."

This was understandable, given that the country wasn't producing enough foodgrains, and if the government had gone about procuring foodgrains as it does these days, it would have led to a further shortage and price rise. It was only in the sixties that government procurement started to go up.

What the government did instead was to import foodgrains and distribute it through the PDS. In fact, by the 1970s, the PDS had become the universal mechanism used by the government for the distribution of subsidised food.[709]

But getting into the 1970s before explaining what happened in the 1960s would be jumping the gun. The import of foodgrains had seen a declining trend between 1951 and 1955. It started rising again in 1956. India had imported around 2.4 million tonnes of foodgrains per year, on an average, between 1950 and 1955. This rose to 3.4 million tonnes between 1956 and 1960. It further rose to 5.1 million tonnes per year, on an average, between 1960 and 1965. Interestingly, wheat accounted for a major part of the foodgrains being imported. Its share increased from 66 per cent between 1950 and 1955 to 85 per cent between 1956 and 1960, and 89 per cent between 1960 and 1965.[710]

It was this imported wheat, along with the rice being produced within the country, that was distributed through the PDS to meet the shortage of foodgrains in the country throughout the sixties.

In 1964-1965, India produced 12.3 million tonnes of wheat. Over and above this, it imported 6.6 million tonnes. Much of this wheat was imported under PL-480 (Public Law 480).[711] PL-480 was an American law which allowed the sale of wheat to developing countries in their local currencies.

India had started importing wheat from the United States in the 1950s. In fact, this imported wheat had come in especially handy

when the monsoons failed in 1957 and 1959 and there was a huge scarcity of wheat. Nevertheless, the country became addicted to this imported wheat. Between 1960 and 1964, India imported 16 million tonnes of wheat. As Gurcharan Das writes in *India Unbound*: "Because of these imports, India began to be seen as a 'basket case' in the world's eyes, especially in Washington."

Getting back to 1964-1965: India imported 6.6 million tonnes of wheat then. This at a time when the landed price of wheat in India would have been around $76.80 per tonne. At this point of time, India had around $524 million of foreign exchange reserves. If all the foreign exchange had been used to buy wheat, it would have allowed the country to buy around 6.8 million tonnes of wheat, which was just a little more than the 6.6 million tonnes that were eventually imported.

Of course, given that much of the wheat was being bought under PL-480, foreign exchange reserves were not used since India was allowed to use rupees to buy the wheat. Nevertheless, this was more like aid and had its own political repercussions.[712]

During the year 1965-1966 the situation became even worse. The production of wheat fell to 10.4 million tonnes from 12.3 million tonnes in the previous year. At the same time, the import of wheat increased to 7.8 million tonnes from 6.6 million tonnes in the previous year.[713]

This led to multiple actions at the government level. First, it set up the Agricultural Prices Commission in 1965 (called the Commission for Agricultural Costs and Prices (CACP) since 1985). The job of the Commission was to come up with two types of administered prices for crops, the minimum support price as well as the procurement price.

In the same year, the government also set up the FCI "to secure a strategic and commanding position for the public sector in the foodgrain trade". As the World Bank report points out: "The Corporation was expected to act as a countervailing force to the speculative activities of the private traders. The Government of India had also transferred the functions of procurement, storage and distribution to the Corporation heretofore [i.e., before then] performed by its department of food in several states. Since then, the Corporation has been undertaking the purchase, storage, movement and distribution of food at the national level. It has also [been]

handling all imported grain and its distribution."

And this is how the government of India got into the procurement of foodgrains. But the question is: What did it procure, given that India wasn't producing enough foodgrains in the first place and was dependent on imports to meet its food needs?

In 1966, the Indian government imported around 18,000 tonnes of high-yielding variety seeds of wheat from Mexico. These seeds were distributed free to farmers in order to encourage their production. These seeds ultimately ushered in India's famous Green Revolution. Within a period of a few years, the wheat imports almost came down to zero. By 1971-1972, India's wheat production had jumped to 26.4 million tonnes from 10.4 million tonnes in 1965-1966. Imports were down to 0.5 million tonnes.[714]

In fact, the FCI played a major role in this increase in the production of wheat. It provided price support in the wheat-growing areas of Punjab and Haryana by buying wheat. This essentially convinced the farmers to grow wheat, given that there was a ready buyer for it. This procurement of foodgrains initially started with the noble motive of helping the farmers who were taking part in the initial phase of the Green Revolution. But that is not how things remained in the years to come (as we shall see).

Also, the Green Revolution gave the government the opportunity to get in and scuttle the private trade in foodgrains. Big Government stepped in and ended up creating a mess. In October 1972, it was announced that the government would take over the wholesale trade in wheat from the next marketing season. The wholesale trade in rice was to be taken over the next year. This turned out to be a big disaster, as wheat started disappearing from the market, prices shot up, and India had to go back to importing wheat. And this time, there was no PL-480 to fall back upon. In 1973, India had to import 2.4 million tonnes of wheat. This shot up to 4.5 million tonnes in 1974 and 7.2 million tonnes in 1975.[715]

The irony of it all was that the Green Revolution was still unfolding. What did not help was the fact that the price of wheat in the international market had shot up from $80.30 a tonne in 1972-1973 to $166.40 a tonne in 1973-1974.[716]

Those were the days when India used import substitution as a strategy and did not have access to huge foreign exchange reserves

like it does now. And the foreign exchange it did have could not all have been used for importing wheat. In this scenario, some good sense prevailed, and the government finally let go of its stupid plan of taking over the wholesale trade of rice and wheat.

As the *Report of the High Level Committee on Reinventing the Role and Restructuring of the Food Corporation of India* (better known as the Shanta Kumar Committee), released in January 2015, points out in this context: "The government of India realised the wrong move it had taken in [its] procurement policy of taking over the wholesale trade in wheat and rice, and finally gave up that policy in 1975 for the better. There was a subtle policy message in all these events: *don't try to take over the markets*, *let the markets function competitively* [emphasis added], wherever they can, and [the] state should enter only where markets fail, and provide an effective floor price to farmers."

But this understanding did not last for long. In the coming decades, the government of India, through the FCI and other state procurement agencies, started to procure as much rice and wheat as was brought to it. And this has had severe repercussions on several fronts.

****

In late June 2016, the Food Minister, Ram Vilas Paswan, said that, by July 2016, the entire country would come under the ambit of the National Food Security Act (NFSA). The minister remarked that the Act, which was "in force in 33 States/UTs", would be implemented in the "states of Tamil Nadu and Nagaland" by July 2016.[717]

The National Food Security Ordinance (NFSO) of 2013 was promulgated on July 5, 2013. A little over two months later, the National Food Security Act was enacted, on September 10, 2013. Given this, it has taken the states nearly three years to implement the Act. But that is not surprising, given that any Big Government measure needs time to be rolled out through the length and breadth of the country.

The Food Security Act essentially made the right to food a justiciable right rather than a general right. It gave food security a statutory backing. The Act offered food security by freezing the price of rice, wheat and coarse cereals at the central issue prices of Rs. 3, Rs. 2 and Re. 1 per kg, respectively, for a period of three years, i.e., up to July 2016.

As we have seen earlier in the chapter, the PDS in India started to evolve during the Second World War. Over the years, it moved towards providing subsidised food. In 1997, the targeted PDS (or TPDS) was launched with a focus on the poor.[718] It aimed at providing food as well as fuel (kerosene) at subsidised prices to the poor through a network of more than five lakh ration shops.

The TPDS was divided into two parts: a) the households below the poverty line (BPL); and b) the households above the poverty line (APL).

Within the BPL category, there is another category, referred to as the 'poorest of the poor'. These households are covered under the Antyodaya Anna Yojana (AAY), which was launched in 2000. It covers the poorest among the BPL category. This includes a) marginal farmers, b) slum dwellers, c) rural artisans, like potters and tanners, d) the destitute, e) primitive tribal households, and f) daily-wage workers in the informal sector, like cobblers, rickshaw pullers, etc.[719]

Nearly 2.42 crore households come under the AAY.[720] Hence, the TPDS essentially had three parts: a) AAY; b) BPL other than AAY; and c) APL. In comparison, the National Food Security Act has only two categories: a) AAY, and b) what it calls 'priority'. As per Section 10(1) of the Act, the definition of priority is left to the state governments.

What is interesting, nonetheless, is that the Act delinks the distribution of subsidised foodgrains from poverty estimates. It aims at covering three-fourths of the rural population and half of the urban population. In fact, as per the 2011 Census, the Act aims at providing subsidised foodgrains to around 16.57 crore households, or 81.35 crore individuals, which is about two-thirds of India's population.[721] This is Big Government at its biggest.

Those coming under AAY are entitled to 35 kilograms of foodgrains every month, as was the case under the TPDS as well. Those coming under the priority category are entitled to 5 kilograms of foodgrains per person per month. There are other entitlements under the Act as well. This includes entitlements of meals for pregnant women, lactating mothers and children up to 14 years of age.[722]

As is the case with most government schemes, the intention was noble, but the consequences turned out to be far-reaching and negative. Let's consider them one by one.

****

The National Food Security Act is built on top of a very leaky PDS, which is used to distribute subsidised foodgrains. Various studies over the years have pointed out towards the same. In a 2011 research paper titled 'Trends in Diversion of Grain from the PDS', Reetika Khera looks at leakages in the PDS between 1999 and 2007. Leakage essentially refers to the proportion of the rice and wheat released by the FCI which does not reach the consumers it is intended for.

In 1999-2000, around 24 per cent of the grain was diverted. The situation got worse, and in 2004-2005, around 54 per cent of the grain was being diverted. This then improved a little, and in 2007-2008, around 44 per cent of the grain was leaking from the PDS.[723]

There were some interesting sub-trends as well. The leakage of wheat was significantly more than that of rice. In 1999-2000, the all-India rice leakage was at 9.9 per cent. For wheat, the figure was at 48.6 per cent. In 2004-2005, 41.3 per cent of rice and 70.3 per cent of wheat were diverted away from the PDS. In 2007-2008, the figures stood at 37.2 per cent and 57.7 per cent, respectively.[724]

Also, the leakages were more in some states than others. As Khera writes: "There is a regional dimension to PDS purchase and diversion rates, with the bulk of the functioning states falling in the peninsular region, whereas, barring Rajasthan and Gujarat, the languishing states are concentrated in the eastern part of the country (Assam, Bihar, Jharkhand and West Bengal)."[725]

Another estimate is made in a December 2012 research paper by the CACP titled 'The National Food Security Bill—Challenges and Options'. As the paper states: "In 2009-10, 25.3 million tonnes were received by the people under PDS while the off-take by states was 42.4 million tonnes, indicating a leakage of 40.4 per cent."[726]

In a February 2015 research paper titled 'Understanding Leakages in the PDS', Jean Drèze and Reetika Khera estimate that leakages had fallen to around 41.7 per cent by 2011-2012, against a leakage of 54 per cent in 2004-2005. A major reason for this fall lies in the fact that states in the Eastern part of the country, which had been very leaky in the past, had shown considerable improvement.

In Jharkhand, the leakage rate fell from 85.2 per cent to 44.4 per cent. In Odisha, the leakage rate fell from 76.3 per cent to 25 per cent.

In Chhattisgarh, the leakage rate fell from 51.7 per cent to 9.3 per cent. States like Punjab, Haryana and Rajasthan also saw a massive fall in leakage rates.

As Drèze and Khera write: "The moderate decline in leakages at the all-India level is largely driven by sharp declines in states that are known to have undertaken serious PDS reforms in recent years, e.g., Chhattisgarh, Odisha and Bihar. On the other hand, a number of states with high leakages have shown virtually no progress between 2004-2005 and 2011-2012, e.g., Madhya Pradesh, Maharashtra and Uttar Pradesh."[727]

But the biggest fall was, rather surprisingly, in Bihar. The leakage fell from 91 per cent to 24 per cent. This is something which is clearly around unexpected lines. For a state which had leakage rates as high as 90 per cent, a leakage rate of 24 per cent is very low indeed. Drèze and Khera further suggest that there had been more improvement since 2011-2012 (as mentioned earlier, their paper was published in February 2015). As they write:[728]

> Reforms took place in the last three years, and particularly in the last 12 months or so, as the Government of Bihar made strenuous efforts to implement the National Food Security Act in anticipation of the assembly elections. A new list of ration cards was prepared.... About 75 per cent of rural households in Bihar today have a new ration card, or an Antyodaya card. For the first time, most people know that they are entitled to 5 kg of foodgrains per person per month from the PDS. Opposition parties are helping them to know their rights and demand their due. All this has put the entire system under tremendous pressure to perform, in sharp contrast with the situation that [had] prevailed until just a few years ago, when most people in Bihar got virtually nothing from the PDS.

Assembly elections happened in Bihar in October and November 2015.

The major part of the all-India leakage happened in the APL, or the above the poverty line category. Using National Sample Survey data, Drèze and Khera show that the leakage in the BPL category was around 30 per cent. In comparison, the leakage in the APL category was at 67 per cent. Given that 11.52 crore households were there in the APL category, this pushes up the overall leakage figure. [729]

The question is: Why was the APL category so leaky? The reason lies in the fact that the APL category became a sort of a dumping ground for excess food stocks. As Drèze and Khera write: "In the absence of any other mechanism to reconcile procurement and distribution, and to avoid further swelling of food stocks that had already gone through the roof, the APL quota was the default outlet....

Very often, APL households had no idea of what they were supposed to get from the PDS. Corrupt dealers dutifully kept them in the dark and exploited their ignorance. In some states, the bulk of the APL quota went straight to the black market."[730]

In another research paper dated January 2015 and titled 'Leakages from the Public Distribution System and the Way Forward', Ashok Gulati and Shweta Saini put the leakage at 46.7 per cent during 2013-2014. In absolute terms, the leakage was at 25.9 million tonnes. As had been observed in Khera's 2011 study, the leakage in wheat was substantially greater than that of rice. Nearly 36.2 per cent of the rice leaked from the PDS, in comparison to 62.9 per cent of the wheat.

In fact, as per Gulati and Saini, in 15 states, the leakage was more than 50 per cent. In some North-Eastern states, like Nagaland and Manipur, the leakages were as high as 95 to 97 per cent. When it comes to leakages in absolute numbers, Uttar Pradesh tops the list.[731]

What this tells us is that, despite less leakage than in comparison to the past, the Indian PDS continues to remain very leaky. As the Shanta Kumar Committee Report points out: "Leakages don't happen in a vacuum. There is connivance at several levels, breeding corruption. It is now time to think out of the box and find some alternative policy solutions that can plug such large-scale leakages and associated corruption, and that can ensure that benefits reach directly to the neediest." This becomes clear from the excessive leakage in the APL category, which couldn't have been possible without the active connivance of the owners of the ration shops that constitute the PDS.

Another factor that needs to be considered here is that, in many states, there are more ration card beneficiaries than the estimated population of the state. This includes states like Chhattisgarh, Andhra Pradesh, Tamil Nadu and Kerala.[732] This basically means that the government is spending much more on food security than it needs to.

The state of Chhattisgarh offers an interesting example. A year before the National Food Security Act was passed, the state passed the Chhattisgarh Food Security Act. The state Act had a greater coverage (at 90 per cent) than the national Act (at 78 per cent) in the state. The state Act offered both rice and wheat at Re. 1 per kg, as compared to the national Act's Rs. 3 per kg for rice and Rs. 2 per kg for wheat.[733]

With a monthly entitlement at 35 kilograms per individual above

the age of 18, there is a huge economic incentive in getting a separate ration card made. This explains why a state with a population of 2.8 crore has 3.1 crore ration cards. Not surprisingly, the food security bill of the state jumped from Rs. 717 crore in 2011-2012 to Rs. 4,600 crore in 2014-2015.[734]

****

The government needs to procure rice and wheat in order to distribute it at a subsidised price through the PDS. While earlier this was a general right, now food security is a legal right under the National Food Security Act. As mentioned earlier, the government declares the minimum support price for 23 crops, of which it primarily buys rice and wheat.

Interestingly, when things first started in the late 1960s, the government used to declare a procurement price as well as a Minimum Support Price (MSP). The MSP acted as a floor price. The assurance was that the price of a commodity would not be allowed to fall below a certain level, even if there was a bumper crop. Over and above this, there was the procurement price at which the government actually bought rice and wheat through the FCI and other state procurement agencies for distribution through the PDS. This price was normally higher than the MSP but lower than the market price. This basically ensured that the market, and not the government, set the price for rice and wheat. This system was done away with in 1975-1976, when the present system of declaring only one price (i.e., the MSP) was started.[735]

For the last four decades, the government has been declaring an MSP at which it buys rice and wheat. The system, as it has evolved, has resulted in open-ended procurement, with the government procuring as much rice and wheat as the farmers bring to it. What has not helped over the years, as is true in the case of sugarcane, is that the various state governments have been declaring bonuses over and above the MSP.

The bonuses over the years led to even more foodgrains ending up with the central government in the godowns of the FCI. This has had multiple repercussions.

The open-ended procurement of rice and wheat by the central government, along with the high bonuses offered by the state governments and the rapid increase in the MSP, led to the *de facto*

nationalisation of the grain trade over the years. Almost three-fourths of the marketable surplus is purchased by the government.[736] This leaves very little for the private trade.

The marketable surplus is essentially the total production minus the total amount of foodgrains retained by the farmer. The latter is done primarily to take care of self-consumption and for seeding purposes, payments to be made in kind to labourers, other necessities of life and gifts.[737] Thus, the marketable surplus is essentially the total amount of produce that is available to be sold in the open market.

In fact, the trend of extremely high purchases was observed between 2006-2007 and 2011-2012. In May 2013, the Comptroller and Auditor General came out with a report titled *Performance Audit of Storage Management and Movement of Foodgrains in the Food Corporation of India*. The report showed how more and more of the rice and wheat being produced by the farmers lands up with the government. In 2006-2007, 75.8 million tonnes of wheat was produced by the Indian farmers. Of this, nearly 18 per cent landed up with the FCI and the state government agencies. In 2011-2012, the wheat produce had shot up to 93.9 million tonnes. Of this, nearly 35 per cent landed up with the FCI and the state government agencies.

When it comes to rice, the situation was even more pronounced. In 2006-2007, the total rice production was at 93.4 million tonnes. Of this, 32 per cent landed up with the FCI and the state government agencies. In 2011-2012, the rice production was at 104.3 million tonnes. Of this, a whopping 54 per cent landed up with the FCI and the state government agencies.

A major reason for this was the fact that the minimum support price was increased at a very rapid rate during the period. As the CAG report pointed out: “No specific norm was followed for [the] fixing of the Minimum Support Price (MSP) over the cost of production. Resultantly, it was observed [that] the margin of the MSP fixed over the cost of production varied between 29 per cent and 66 per cent in [the] case of wheat and 14 per cent and 50 per cent in [the] case of paddy during the period 2006-2007 to 2011-2012.”

Typically, the MSP needs to be fixed depending on the rates recommended by the CACP, which comes under the Ministry of Agriculture. While determining the MSP, the CACP takes into account the cost of production, domestic and international market prices, stock

position, prices fixed in previous years, etc. So even though there is a robust method for determining the MSP at which the government of India should buy rice and wheat from farmers, that was not being followed.

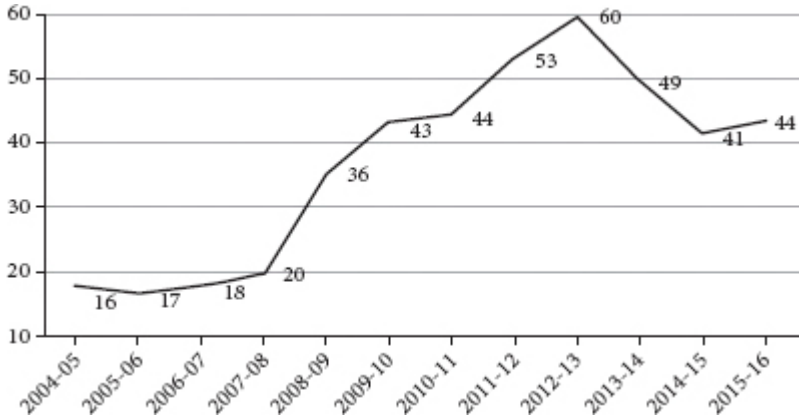
Furthermore, as more and more rice and wheat landed up with the government, there was less of it available in the open market. In 2006-2007, 63.3 million tonnes of rice ended up in the open market. By 2011-2012, this had fallen, by a huge 23.6 per cent, to 48.3 million tonnes. The same was true for wheat as well, though the drop was not as pronounced as it had been in the case of rice. In 2006-2007, the total amount of wheat in the open market had stood at 62.1 million tonnes. By 2011-2012, this had dropped to 61.4 million tonnes.

Take a look at Figure 12.2, which shows us how the government stock of foodgrains has gone up over the years.

As can be seen from Figure 12.2, the stock of foodgrains with the government went up from around 18 million tonnes in 2004-2005 to around 60 million tonnes in 2012-2013. This meant that not enough rice and wheat was going around in the open market, and this, not surprisingly, led to cereal inflation.

As can be seen from Table 12.2, cereal inflation peaked in 2013-2014, after the cereal stocked with the government had correspondingly peaked in 2012-2013. Hence, Big Government essentially drove the price of foodgrains up. The irony was that, while the godowns of the FCI and other state procurement agencies were burgeoning with rice and wheat, prices in the open market were going up.

Figure 12.2: Government stock of foodgrains (in million tonnes) between 2004-2005 and 2015-2016.



Source: Food Corporation of India.

In fact, the government had procured so much rice and wheat during this period that it had the additional problem of storing it properly. During this period, pictures and reports of rice and wheat rotting in FCI godowns appearing in newspapers was a routine affair. And this wasn't surprising. In June 2012, the total quantity of foodgrains with the FCI had peaked at 82.4 million tonnes.

Table 12.2: Urban, rural and overall cereal inflation (in percentage) between 2012-2013 and 2015-2016.

Year	Overall	Urban	Rural
2012-13	10.3	11.7	9.6
2013-14	12.4	13.5	11.8
2014-15	5.2	4.2	5.6
2015-16	1.8	0.04	2.7

Source: Centre for Monitoring Indian Economy.

This hurt in two ways. One, as we have seen, is that it drove up foodgrain prices. The other problem was that a lot of government money had been used up in buying what was essentially a useless asset. (How does excess foodgrains rotting in godowns help anyway?) When the government had bought this excess of foodgrains, the money was paid out. This excess money chased the same amount of goods and services, and drove up inflation in the process. Also, this money could have been better used somewhere else.

Ashok Gulati and Shweta Saini estimate in a research paper titled 'Buffer Stocking Policy in the wake of NFSB: Concepts, Empirics and Policy Implications' that the "value locked in these excess stocks, evaluated at their economic cost, ranges from Rs. 70,000 crore to Rs. 92,000 crore".[738] This was also the time when the government was running a high fiscal deficit and the money could have been much better utilised elsewhere.

What did not help was the fact that the government had been acquiring significantly more foodgrains than it had the capacity to store. As on April 1, 2012, the storage capacity of the FCI stood at 33.6 million tonnes. Over and above this, the Central Warehousing Corporation had a total storage capacity of 10.6 million tonnes. This meant that the total storage capacity worked out to a little over 44 million tonnes.[739] Given this, it was hardly surprising that newsreports and pictures of rotting grains appeared in the media.

Nonetheless, the interesting thing is that cereal inflation has actually come down after peaking in 2013-2014. The reason for this lies in the fact that the total amount of foodgrains with the government has also come down. In 2012-2013, the foodgrains in store had stood at around 60 million tonnes. By 2014-2015, this had fallen, by around a third, to 41.3 million tonnes.

This, of course, meant that the availability of foodgrains in the open market went up and, in the process, cereal inflation came down. One reason for this lies in the fact that, in July 2014, the Narendra Modi government made a policy decision which limited the ability of the state governments to declare a bonus on rice and wheat over and above the MSP.

If a surplus state (i.e., a state which produces more foodgrains than it requires for distribution through the PDS) declares a bonus, then it can go ahead with the procurement, but the FCI will only acquire as much as would be required to meet the needs of the PDS in that state. The state government would have to bear the cost of any 'extra' procurement.

This is a major reason behind the fall in the stocks of foodgrains with the government. The other reason is a slower increase in the MSP of rice and wheat over the past few years. Between 2005-2006 and 2012-2013, the MSP of wheat went up from Rs. 650 per quintal to Rs. 1,350 per quintal at the rate of 11 per cent per year. Since then, between 2012-2013 and 2015-2016, the prices have gone up, by around 4.2 per cent per year, to Rs. 1,525 per quintal.

In the case of rice, the MSP went up from Rs. 570 per quintal in 2005-2006 to Rs. 1,250 per quintal in 2012-2013 at the rate of 11.9 per cent per year. Since then, this has slowed down. Between 2012-2013 and 2016-2017, the price has gone up, by 4.1 per cent per year, to Rs. 1,470 per quintal. Hence, lesser meddling by the government has led to a slower increase in the price of foodgrains.

****

The government of India maintains, through the FCI, a certain amount of buffer stock in order to ensure that it has enough grains to distribute through the PDS. This also includes strategic stocks of five million tonnes of foodgrains (three million tonnes of wheat plus two million tonnes of rice).

In January 2015, the Cabinet Committee of Economic Affairs (CCEA) revised these norms. Table 12.3 shows the total amount of buffer stock that needs to be maintained at various points of time during the course of any year.[740]

Table 12.3: Mandated buffer stock of foodgrains (in million tonnes).

Date	Buffer Stock
1st October	21.2
1st January	25
1st April	21.2
1st July	31.9

Source: Food Corporation of India

While the total amount of foodgrains stocked with the government has come down over the past few years, the government still stocks more than what is required. Take a look at Figure 12.3, which shows the actual stock of foodgrains with the government over the past year and compares it with the mandated buffer stock. As is clear, the government has been stocking much more than what it requires to maintain under the buffer stock.

This excess stocking costs the government a lot of money. It is worth remembering here that the FCI and other state procurement agencies procure rice and wheat at a certain price. This is then sold throughout the country at a significantly lower price. Let's take the case of rice. In the marketing season 2016-2017, it will be acquired at Rs. 1,470 per quintal, or Rs. 14.70 per kilogram.

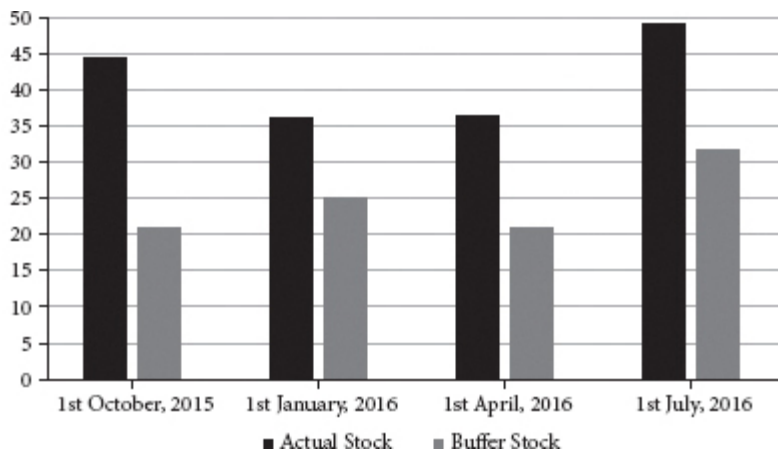
Under the National Food Security Act, this rice will be sold at Rs. 3 per kg. Hence, the FCI will lose Rs. 11.70 for every kilogram of rice that it sells. Over and above this loss, it also has to bear the procurement as well as distribution costs. The procurement costs include statutory charges, like the market fee, rural development cess, value-added tax, etc. It also includes costs like the cost of gunny bags, administrative costs, labour and transport charges, etc. Distribution costs include costs like handling expenses, storage expenses, interest charges (on the working capital loans that the FCI takes on), transit losses, storage losses, etc.[741]

If the amount of actual stock is above the buffer stock, the costs of the FCI go up. This includes costs like storage costs as well as storage losses. The government needs to compensate the FCI for this. As Vijay Paul Sharma writes in an IIM Ahmedabad working paper titled 'Food

Subsidy in India: Trends, Causes and Policy Reform Options': "The share of… subsidy recorded an increasing trend since 2007-08 due to [the] build-up of foodgrain stocks with the FCI."[742]

This happens against the backdrop of the government perpetually trying to bring down its fiscal deficit. In the process, the FCI gets short-changed. As I write this, in early August 2016, the unpaid dues of the government to the FCI amount to Rs. 61,000 crore. (As we have seen earlier, in Chapter 10, this is the bit about the government fudging accounts in order to meet its fiscal deficit target.) In order to keep operating, the FCI needs to keep borrowing. In 2013-2014, it borrowed Rs. 35,150 crore. This jumped to Rs. 70,820 crore by 2015-2016. This basically implies two things: a) foodgrains are being sold cheap; and b) foodgrains are being sold cheap on borrowed money, which ultimately adds to the fiscal deficit of the government. This tells us that Big Government can hurt in many more ways than what seems obvious.[743]

Figure 12.3: Actual stock versus the buffer stock of foodgrains (in million tonnes) between 1st October 2015 and 1st July 2016.



Source: Food Corporation of India.

This has led to the food subsidies of the government soaring over the years. The food subsidies of the government in 1979-1980 had stood at Rs. 600 crore, or 0.52 per cent of the GDP. This jumped to Rs. 92,000 crore, or 0.88 per cent of the GDP, in 2013-2014. These calculations are based on the GDP at current prices with a base year of 2004-2005. (In January 2015, India moved towards a new method of calculating the GDP. The trouble is that the figures for this new series are available only up to 2011-2012 as of now. Hence, I have made a comparison only until 2013-2014, even though more recent statistics

are available.)

Nevertheless, we can look at the numbers for 2014-2015 and 2015-2016 in isolation. In 2014-2015, the food subsidies had stood at Rs. 1,17,671 crore, or 0.94 per cent of the GDP. In 2015-2016, the food subsidies stood at Rs. 1,39,419 crore, or 1.03 per cent of the GDP. Hence, there has been a clear jump in the food subsidies in recent years. Given that a huge proportion of the foodgrains never reaches those it is intended for, there is a huge amount of leakage taking place. Furthermore, the over-procurement by the government adds to the problem.

Also, it needs to be kept in mind that the food subsidy figure, currently at 1.03 per cent of the GDP, is still understated. This is basically because the government hasn't paid the FCI all that it has to for carrying out the food procurement and distribution operations. The government follows a cash accounting system and only acknowledges expenses once payment has been made. This has led to a situation wherein payments to the FCI remain unpaid. The money has been spent by the FCI, but remains unpaid by the government, and hence, is not acknowledged as an expenditure (as explained earlier in Chapter 10).

Obviously, figuring out what is wrong with India's open procurement policy isn't rocket science. Various research studies have pointed towards the same. So has the Shanta Kumar Committee, which presented its report in January 2015.

The government is trying to achieve multiple objectives through the single tool of open procurement and then stocking.[744] It is trying to ensure that it has enough strategic stock of foodgrains so that, in the case of price volatility, it can release grains into the open market and prevent a rapid increase in prices. At the same time, it is trying to ensure that it has enough foodgrains in order to meet the requirements of the Food Security Act. Thirdly, it is trying to ensure that the nutritional needs of the people are met. The trouble is that nutrition needs cannot be met by just providing rice and wheat at a cheap price. In fact, one impact of the open procurement of rice and wheat has been that farmers haven't been growing enough pulses, leading to a huge spike in their prices over the past few years.

Finally, by offering a minimum support price and carrying out

open procurement and stocking, the government is trying to incentivise the production of rice and wheat. The trouble is that, at times, these needs are at odds with one another. Take, for example, the fact that open procurement, with the government buying as much rice and wheat as the farmers bring to it, leads to lesser grain in the market and, in the past, has pushed up prices. So, while the government has ended up encouraging production, it has, at the same time, gone against food security by ensuring that the prices of foodgrains go up.

Or take the fact that price support for rice and wheat discourages farmers from growing other crops like pulses. This pushes up the prices of these crops. This makes it difficult for people to fulfil their nutritional needs.

****

Earlier in the chapter, we saw that a major portion of the foodgrains that the government distributes through the PDS does not reach those it is intended for. So one end of the chain is *very* leaky. How about the other end? Does the procurement of foodgrains benefit farmers who sell to the government? And if it does, what proportion of the farmers does it benefit?

The question that needs to be answered here is whether farmers are aware of the MSP policy? The answer is not very encouraging on this front. The Economic Survey of 2015-2016 does not paint a pretty picture. As it points out: "[In] Punjab and Haryana, almost all paddy and wheat farmers are aware of the MSP policy…. Even for paddy and wheat, where active procurement occurs, there is a substantial variation across states – with only half or less paddy and wheat farmers reporting awareness of [the] MSP, especially in states such as Gujarat, Maharashtra, Rajasthan, Andhra Pradesh and Jharkhand. This points to the possibility that procurement in these states may be happening in some districts and not in others."

This lack of awareness essentially ensures that very few farming households actually benefit from the MSP. As the Shanta Kumar Committee Report points out:

> If one adds all agricultural households having sold paddy and wheat to any procurement agency, the number of households comes to just 5.21 million (2.55 million paddy households during July-Dec 2012; 0.55 million paddy households during Jan-June, 2013; and 2.11 million wheat households during Jan-June 2013). This figure of 5.21 million households, as a percentage of [the] total number of agricultural households (90.2 million), comes to just 5.8 per cent.

> This is the finding from the latest survey conducted by [the] NSSO, with such detailed questions on issues of households' awareness about [the] MSP and selling their produce to procurement agencies. But if one adjusts this with common households that sell both paddy and wheat, and/or by the per cent of quantity sold by each household at [the] MSP, the figure of direct beneficiaries comes even lower.

As we can see for rice and wheat, less than six per cent of the farming households benefit from the MSP policy of the government. For other crops, the numbers are even lower. Furthermore, much of this procurement seems to be happening from the large farmers in a few selected states, like Punjab, Haryana, Andhra Pradesh, Madhya Pradesh and Chhattisgarh.[745]

As the Shanta Kumar Committee Report points out: "In some of these states, state agencies procure 70-90 per cent of [the] marketed surplus of wheat and rice, literally taking over the markets and crowding out [the] private sector, committing [the] similar mistake as was committed during the wholesale trade take-over during 1973-75. It speaks of a highly skewed incentive system in favour of larger farmers."

There are multiple things which aren't right here. One, the MSP policy largely benefits large farmers. Two, it is concentrated only in a few states, and hence, other states lose out. Inequity of such a large proportion shouldn't be happening in the world's largest democracy. Three, more importantly, it encourages farmers to grow crops in areas where they shouldn't be grown.

Take the case of rice being grown in Punjab. Rice needs a lot of water. Hence, it shouldn't be grown in a semi-arid region like Punjab. But given that the acquisition of rice is concentrated in that region, Punjab is the fourth largest rice-producing state in India. In fact, in 2014-2015, it produced 11.25 million tonnes of rice. The state of West Bengal produced the most rice, at 15 million tonnes.

As far as land productivity is concerned, Punjab has by far the highest rice productivity in India. The state produces 39.3 quintals per hectare. This is followed by Haryana, at 32.1 quintals per hectare, and Andhra Pradesh, at 30.5 quintals per hectare. Of course, land productivity does not take the usage of water into account.

As the document titled *The Price Policy for Kharif Crops: The Marketing Season for 2016-17*, brought out by the CACP, points out: "If

water consumption is measured in terms of per kilogram of rice, West Bengal becomes the most efficient state, which consumes 2,169 litres to produce one kg of rice, followed by Assam (2,432 litres) and Karnataka (2,635 litres). The water use is high in Punjab (4,118 litres), Tamil Nadu (4,557 litres) and Uttar Pradesh (4,384 litres). … [This] shows that the most efficient state in terms of land productivity is not necessarily the most efficient if irrigation water is factored into. This is because of high rainfall in the eastern region."

So, once water usage is taken into account, Punjab really doesn't come out on top when it comes to productivity. A major reason why Punjab is able to produce as much rice as it does despite being in a semi-arid region, where a large amount of water isn't available (unlike in the case of West Bengal), is because electricity is free for farmers. This essentially leads to massive over-pumping of water to grow rice.

As per the Central Ground Water Board, out of the 137 blocks in Punjab, 110 come under the over-exploited category when it comes to water.[746] Furthermore, the document titled *The Price Policy for Kharif Crops: The Marketing Season for 2015-16* points out: "Given that this water is extracted by mining groundwater, as is being done in much of… [the] Punjab and Haryana belt (particularly in [the] case of rice), where [the] water table is receding by 33 cm each year, thereby shrinking its per capita availability...."

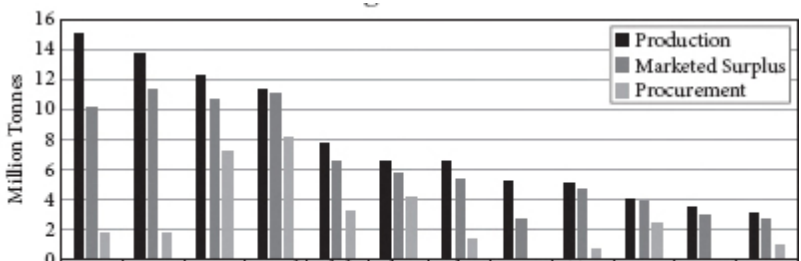
It is only with this exploitation of groundwater that Punjab manages to end up producing as much rice as it does. As mentioned earlier, in 2014-2015, it managed to produce 11.25 million tonnes of rice, only a little less than Andhra Pradesh, which produced 12.23 million tonnes.

Also, given the dietary habits of Punjabis, almost all of the rice that the state produces ends up as a marketable surplus. This isn't surprising, given that Punjabis are primarily *roti* eaters and that *rotis* are basically made from wheat. In fact, of the 11.25 million tonnes of rice which Punjab produced in 2014-2015, 11.19 million tonnes ended up as a marketable surplus.

Of the marketable surplus, 8.15 million tonnes of rice was acquired by the FCI and other state procurement agencies. This is the highest quantity of rice that the government acquired from any state that year (as is clear from Figure 12.4(a)).

Figure 12.4(a): State-wise marketed surplus (absolute figures) of rice

during 2014-2015.

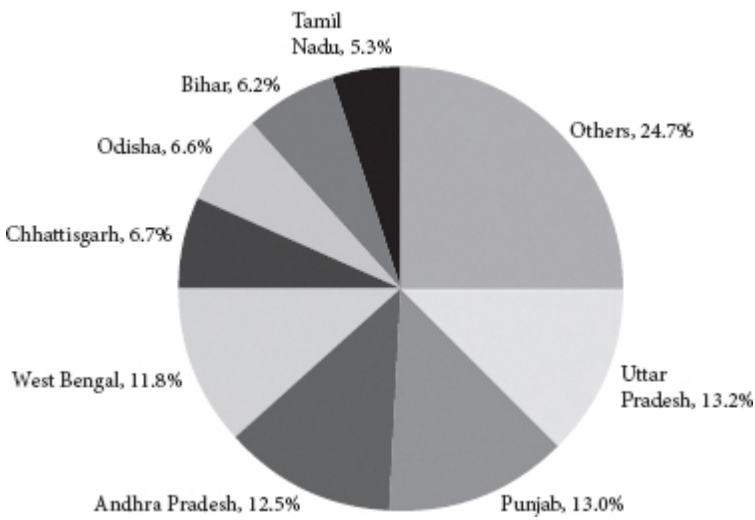


	WB	UP	AP	Punjab	Odisha	Chatt	Bihar	Assam	TN	Har	Kar	MP
Production	15.02	13.74	12.23	11.25	7.74	6.55	6.47	5.09	5.04	3.99	3.49	3.08
Marketed Surplus	10.14	11.42	10.75	11.19	5.72	5.76	5.33	2.59	4.59	3.73	2.94	2.71
Procurement	1.72	1.7	7.22	8.15	3.26	4.17	1.29	0.01	0.74	2.34	0.05	0.92

Source: The Price Policy for Kharif Crops: The Marketing Season for 2016-17, CACP.

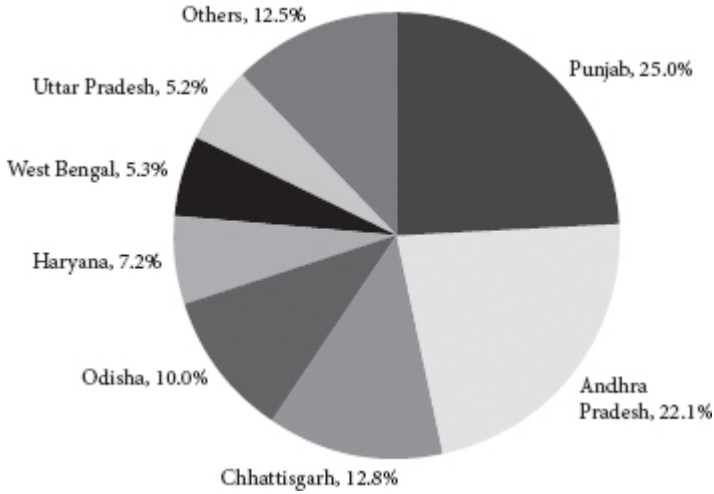
What the pie charts (Figures 12.4(b) and 12.4(c)) tell us is that Punjab has 13 per cent of the country's marketable surplus when it comes to rice, but the government ends up procuring one-fourth of the total rice from the state. This shows that the fact that the government procures the maximum amount of rice from Punjab encourages the farmers to produce more rice in a semi-arid region.

Figure 12.4(b): Percentage distribution of the state-wise marketed surplus of rice during 2014-2015.



Source: The Price Policy for Kharif Crops: The Marketing Season for 2016-17, CACP.

Figure 12.4(c): Percentage distribution of the state-wise procurement of rice by the government in 2014-2015.



Source: The Price Policy for Kharif Crops: The Marketing Season for 2016-17, CACP.

As the document titled *The Price Policy for Kharif Crops: The Marketing Season for 2016-17* points out:

> A perpetual skewedness in the procurement in different states raises the issue of equity, which needs to be addressed urgently to achieve the objective of the price policy (MSPs). For example, there was almost negligible procurement of rice in Assam during [the] triennium[xix] ending [in] 2014-15, even though it contributed 4.7 per cent to the total rice production. As regards West Bengal, the procurement share is only 5.3 per cent, though [the] marketed surplus share is 12 per cent. There is low procurement in Bihar, though the marketed surplus share is 6 per cent. In comparison, [from] Punjab [was] procured 24.9 percent of rice, against its marketed surplus share of 13 percent during the corresponding period.

To cut a long story short, farmers in the eastern part of the country are currently being short-changed in the way the procurement policy of the government is being run. In fact, farmers in Assam, Bihar, eastern Uttar Pradesh and West Bengal have small holdings, and they also end up selling their produce at distress prices which are much below the MSP.[747] All this clearly tells us that the MSP policy of the government isn't working well. There are way too many problems with it, and we are not yet done with analysing them all as yet.

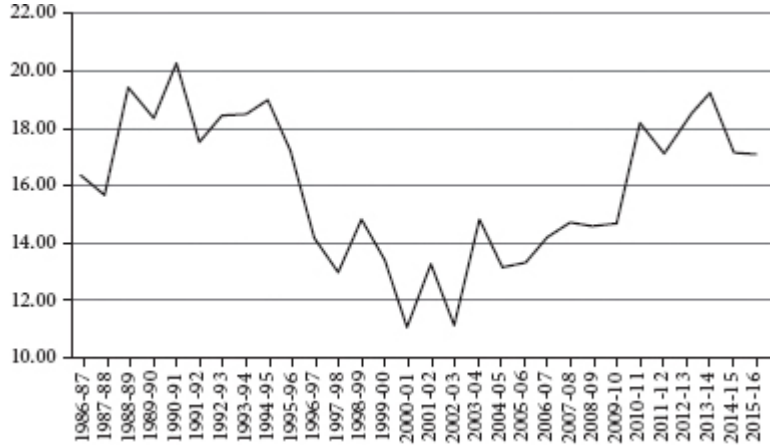
****

One significant area of impact of the MSP system, as it has evolved over the years, is that India is producing much more rice and wheat than it requires. At the same time, farmers do not have enough incentive to grow other crops, like pulses. As the Shanta Kumar Committee Report points out: "Currently, MSPs are announced for 23 commodities, but… price support [effectively] operates primarily in

wheat and rice and that too in selected states. This creates highly skewed incentive structures in favour of wheat and rice. While the country is short of pulses and oilseeds (edible oils), their prices often go below the MSP without any effective price support."

Take a look at the Figure 12.5(a), which shows the total production of pulses in the country over the past 30 years.

Figure 12.5(a): The total production of pulses (in million tonnes) over the past three decades.

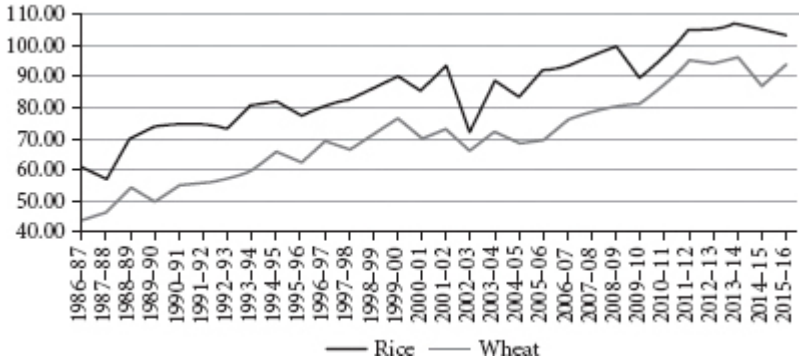


Source: Centre for Monitoring Indian Economy, 2015-2016: Third Advanced Estimates of Agricultural Production.

As is obvious, the total production of pulses has more or less remained flat over the past thirty years. In 1986-1987, India produced 16.3 million tonnes of pulses. In 2015-2016, the total production was at 17.1 million tonnes, as per the third advanced estimate published by the Ministry of Agriculture. Of course, during the three decades the production of pulses did vary on a yearly basis.

Interestingly, the production of pulses crossed 20 million tonnes just once, and that was as far back as 1990-1991, more than a quarter of a century ago. Now take a look at what has happened to the production of rice and wheat during the same period (Figure 12.5(b)).

Figure 12.5(b): The total production of rice and wheat (in million tonnes) over the past three decades.



Source: Centre for Monitoring Indian Economy, 2015-2016: Third Advanced Estimates of Agricultural Production.

Unlike the curve in the pulses chart, both the curves in Figure 12.5(b) are upward sloping. Hence, the production of both rice and wheat has steadily gone up over the past 30 years. In 1986-87, the production of rice was at 60.6 million tonnes. This had jumped to 103.4 million tonnes by 2015-2016. In the case of wheat, the corresponding production has jumped from 44.3 million tonnes to 94 million tonnes.

During the same period, the production of pulses has more or less been flat. While this did not matter much earlier, in recent years, as dietary patterns have changed and are favouring greater protein consumption, the demand for pulses has gone up, as pulses remain a major source of protein. This explains why, over the past few years, the prices of pulses have gone through the roof. This escalation in price has been led by *arhar dal* (pigeon peas), where the prices have even crossed Rs. 200 per kg. In 2015-2016, the pulses inflation was at 31.9 per cent. And this has been a great cause of public grief as well as resentment all over the country.

The question is: Why has this happened? The best explanation lies in the fact that the main foodgrains, namely rice and wheat, are grown in the most fertile and irrigated areas of the country.[748] Let's take the case of the proportion of crops under irrigated area. In 2011-2012 (the latest figure that is available), the proportion of total foodgrains under irrigation had stood at 49.8 per cent. Hence, half of the area under foodgrain production in India has access to irrigation. In 1986-1987, the figure had stood at 32.7 per cent.[749]

The trouble with averages is that they never give you the complete picture. How do things look for the different kinds of foodgrains?

When it comes to rice, in 2011-2012, 58.7 per cent of the area under production was irrigated. In 1986-1987, the figure had stood at 44.1 per cent.

How do things look for wheat? In 2011-2012, 92.9 per cent of the area under production had access to irrigation. In 1986-1987, the number had stood at 76.3 per cent.[750]

What this tells us is that almost all of the wheat being produced comes under irrigated areas and so does close to three-fifths of the rice being produced. But when it comes to pulses, in 2011-2012, the area under irrigation was just 16.1 per cent. In 1986-1987, the number had stood at 9.6 per cent.[751]

One impact of this is that, in a bad monsoon year, the production of pulses falls, and this drives up prices (as can be seen from Table 12.4). This is precisely what has happened over the past few years. In 2014-2015 and 2015-2016, India did not get enough rain, and that led to a fall in the production of pulses, which, in turn, drove up prices.

Table 12.4: Total pulses production (in million tonnes) over the past four years.

Year	Total Production
2012-13	18.3
2013-14	19.3
2014-15	17.2
2015-16	17.1

Source: Centre for Monitoring Indian Economy.

As the Economic Survey of 2015-2016 points out: "It is immediately apparent that the production pattern for pulses is very different from other crops. Not only is most of the land dedicated to growing pulses in each state unirrigated, but the national output of pulses comes predominantly from unirrigated land. In contrast, a large share of [the] output in wheat, rice and sugarcane – in Punjab, Haryana and UP – is from irrigated land. In water-scarce Maharashtra, all sugarcane is grown on irrigated land."

And therein lies the answer to why the production of pulses is almost the same as it was three decades ago. With the government carrying out open procurement of rice and wheat, there is clearly more incentive in sowing rice and wheat, especially on irrigated and fertile land. Big Government is at the heart of the mess that prevails in India's pulses sector.

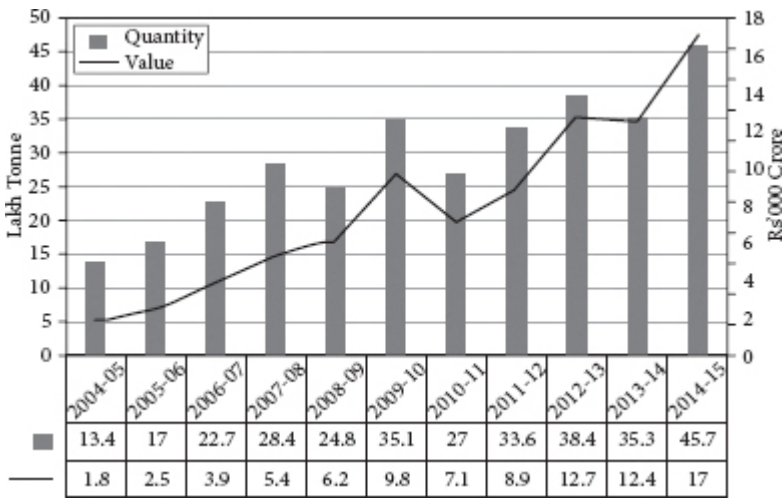
Also, the area under production of pulses has barely moved over the past thirty years. In 1986-1987, the area under production of pulses was at 23.2 million hectares. In 2015-2016, it stood at 24.9 million hectares.[752]

****

So what is the way of addressing the shortage of pulses in India? The government has been trying to handle this by importing pulses. Since June 2006, the import duty on pulses continues to be at zero per cent. Before this, it was at 10 per cent. The export of pulses has also been prohibited from time to time since then.[753]

Take a look at the Figure 12.6. It shows the total amount of pulses that have been imported by India between 2004-2005 and 2014-2015.

Figure 12.6: Quantity of pulses imported (in lakh tonnes) and expenditure for the same (in thousand crores) between 2004-2005 and 2014-2015.



	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
■	13.4	17	22.7	28.4	24.8	35.1	27	33.6	38.4	35.3	45.7
—	1.8	2.5	3.9	5.4	6.2	9.8	7.1	8.9	12.7	12.4	17

Source: The Price Policy for Kharif Crops: The Marketing Season for 2016-17, CACP.

As can be seen clearly, the quantity of pulses imported has jumped from 1.34 million tonnes in 2004-2005 to 4.57 million tonnes in 2014-2015. In 2015-2016, the total import of pulses jumped to 5.8 million tonnes.[754] This is not a sustainable strategy for the simple reason that India is the single largest producer of pulses as well as the single largest importer in the world.

As *The Price Policy for Kharif Crops: The Marketing Season for 2016-17* points out: "India being the largest producer, consumer and importer of pulses in the world, its domestic demand-supply volatility has a high impact on international trade." While the country produced around 23.9 per cent of the total global production for the period of the three years till 2014, it imported around 30.7 per cent of the total global imports during the period.[755]

The imports are carried out from a whole host of countries. Take the case of *arhar dal*. It is imported primarily from Myanmar (46.4 per cent), Tanzania (18.7 per cent), Mozambique (15.4 per cent), Malawi (12.6 per cent) and Sudan (3.4 per cent). *Moong* (or *urad dal*) is primarily imported from Myanmar (70.4 per cent), Kenya (7.4 per cent), Australia (6.3 per cent), Tanzania (3.2 per cent) and Uzbekistan (2.6 per cent). [756]

Hence, the point is that, if India has to solve this problem of the inadequate supply of pulses, it needs to increase its domestic production of the same. The short-term solution lies in the effective monitoring of the situation on a regular basis. Typically, by the time the government wakes up to the fact that there is a problem because pulses are in short supply and then starts importing, the damage has already been done. An early warning system would help the government.

Nevertheless, most solutions are long term in nature. Economists have called for the government to start acquiring pulses at the MSP as well. While the government does announce the MSP for pulses every year, it does not have the infrastructure to buy them from the farmers. This is primarily because the government has always concentrated on procuring rice and wheat. In 2014-2015, the National Agricultural Cooperative Marketing Federation of India (NAFED), one of the government agencies which are supposed to buy pulses, procured only 306.3 tonnes of assorted pulses, at a price of Rs. 1.9 crore.[757]

In 2015-2016, the government changed track and decided to start

buying pulses at the MSP from the farmers so as to build a buffer stock. This has two aims. One is to offer a fixed price to the farmer and encourage him to cultivate pulses, just as he has been cultivating rice and wheat until now. This would help increase the production of pulses. The second aim is to build a buffer stock of pulses so that, if the prices go up, this stock can be released into the market in the hope of bringing down the prices.

The trouble is that this strategy will create problems in the short term. In 2015-2016, the aim was to buy 50,000 tonnes of pulses from the *kharif* crop. This operation was carried out through the FCI, NAFED and the Small Farmers Agri-business Consortium (SFAC). During the period, the government bought 45,532 tonnes of *arhar dal* and 4,892 tonnes of *urad dal*.[758]

In the *rabi* season of 2016-2017, the aim is to buy 1 lakh tonnes of pulses from the farmers. As on July 29, 2016, the government had bought 1,19,472 tonnes of pulses from farmers through various agencies.[759]

Figure 12.7: The international and domestic prices (in rupees per quintal) of *arhar dal* (pigeon peas) between April 2012 and June 2016.

Source: Commodity Profile for Pulses, July 2016.

This is a bit of a chicken-and-an-egg story. In the past few years, due to bad monsoons, the overall production of pulses has fallen. In 2015-2016, the production of pulses fell to 17.1 million tonnes, from 19.3 million tonnes in 2013-2014. In this scenario, as the government procures more pulses, the supply in the open market will fall, pushing up prices. Take the case of *arhar dal* (see Figure 12.7). It is estimated that its consumption varies from anywhere between 3.3 and 4 million tonnes.[760] The production of *arhar dal* in 2015-2016 is estimated to be at 2.6 million tonnes.[761] The government buying 45,532 tonnes of *arhar dal* takes away close to 1.75 per cent of the total production in

an already tight market. Not surprisingly, the price of *arhar* in 2015-2016 went up, as can be seen from Figure 12.7.

What does not help is the fact that very few farmers know that an MSP for pulses exists.[762] This is how things will operate, with spurts in the prices of pulses, until enough farmers know about the fact that the government is procuring pulses as well, along with rice and wheat of course. This knowledge will then lead to more farmers cropping pulses and a gradual increase in production in the years to come.

One negative influence of this over the long term could be farmers growing more and more of pulses and not enough of some other crop. This also shows the inability of the government to create conditions where private agricultural markets can thrive.

Having said that, there are many advantages of growing more pulses. They meet the protein requirements of vegetarians in a big way. They need much less water than other crops. On top of that, they are nitrogen fixing, and hence, need a lesser amount of fertilizers as well. This means that an increase in the production of pulses, instead of rice and wheat, could lead to savings on the input subsidy front (irrigation, fertilizers as well as power).[763]

To cut a long story short, it will not be very easy to sort out the mess that Big Government has created in the pulses sector. Driving up the domestic production of pulses in the years to come will not be a cakewalk. There are too many things going against it.

****

Other than buying the rice and wheat that they produce, the government also provides fertilizers at a subsidised price to farmers.

The subsidy is paid to the companies which manufacture and sell urea. Urea is the only controlled fertilizer and is sold at a statutory notified uniform sale price. This is like the rice and wheat sold through the PDS being sold at a central issue price of Rs. 3 per kg and Rs. 2 per kg, respectively. The FCI is compensated for this loss-incurring sale. Similarly, the fertilizer companies need to be compensated for selling urea at a notified uniform sale price. The phosphatic and potassic fertilizers are decontrolled and are sold at indicative Maximum Retail Prices (MRPs).

This subsidy was first introduced in 1977, with the introduction of the retention price scheme for urea, because of the then volatile global prices of natural gas as well as urea. It needs to be mentioned here that the fertilizer subsidies include a subsidy for natural gas, which is an important input in the production of urea.[764]

In 1979-1980, the fertilizer subsidy had stood at Rs. 526 crore. In 2016-2017, it has been budgeted to be at Rs. 70,000 crore. This gives us a ratio of 133:1. Indeed, that sounds like a huge jump in the fertilizer subsidies since they were first introduced.

How do things look when we look at the fertilizer subsidy as a proportion of the GDP? The fertilizer subsidies in 1979-1980 had stood at 0.46 per cent of the GDP. By 2008-2009, they had jumped up to a whopping 1.44 per cent of the GDP. This happened primarily because of the sale of decontrolled fertilizers (phosphatic and potassic fertilizers) at concessional rates to farmers. In fact, this was the trend seen between 2008-2009 and 2011-2012. In 2008-2009, the total subsidies on the sale of decontrolled fertilizers at concessional rates to farmers had stood at Rs. 48,555 crore and formed a little over half of the total subsidies of Rs. 96,603 crore.[765]

Since 2008-2009, things have been reined in to some extent. In 2013-2014, the fertilizer subsidies stood at 0.64 per cent of the GDP.

If we look at the fertilizer subsidies for 2014-2015 and 2015-2016 in isolation (the reason for this has been explained earlier in the chapter), the figures stand at 0.57 per cent and 0.53 per cent of the GDP, respectively. So does this mean that Big Government has done a big job of cutting down on its fertilizer subsidies? Not really.

Just like in the case of food subsidies, fertilizer companies continue to remain unpaid for selling urea at a notified price. It is estimated that, as of March 2016, the total amount of money that remained unpaid to fertilizer companies had stood at Rs. 45,000 crore.[766] How will things look if this amount is added to the total fertilizer subsidy?

The absolute amount of the fertilizer subsidy in 2015-2016 stood at Rs. 72,438 crore. If the unpaid amount is added to it, the 'real' fertilizer subsidy jumps to Rs. 1,17,438 crore, or 0.87 per cent of the GDP. So, this tells us very clearly that things have not improved as much as they seem to have if the amount that remains unpaid to the fertilizer companies is taken into account as well.

Nevertheless, India has benefited from the usage of fertilizers over the years. The production of foodgrains has increased manifold since Independence. The total foodgrains produced in 1950-1951 had stood at 50.8 million tonnes, with the yield at 522 kilograms per hectare. By 2013-2014, this had jumped to 265 million tonnes. Due to bad monsoons, the total production fell over the next two years and was at 252 million tonnes and 252.2 million tonnes (4th advanced estimate) in 2014-2015 and 2015-2016, respectively.

So India produces five times the total amount of foodgrains now in comparison to what it did immediately after Independence. Of course, the area under production of foodgrains has also gone up, from 97.3 million hectares in 1950-1951 to 126.04 million hectares in 2013-2014. So the production has gone up many times more in comparison to the increase in area on which the foodgrains are grown. This is primarily because of the increase in the yield of the foodgrains, from 522 kg per hectare in 1950-1951 to 2,101 kg per hectare in 2013-2014.

Much of this increase was because of the usage of high-yielding varieties of seeds along with an increase in the area under irrigation as well as a higher usage of fertilizers. Given this, it is difficult to separate the impact that each of these factors have had on the increase in the production of foodgrains in India. Nevertheless, it is safe to say that the increased usage of fertilizers did help increase the production of foodgrains in India.[767]

As mentioned earlier, the price of urea has still not been decontrolled. And this goes against the one product-one price paradigm. What does this mean? If one product is sold at two prices, say at a cheaper price to a subsidised group of consumers and at a higher price to consumers who are not eligible for the subsidy, and hence, who pay a higher price, it is likely to be diverted from the subsidised group to the ineligible group.[768]

This is precisely what seems to have been happening in the case of urea. In the Indian case, the Indian farmers are the subsidised group of consumers (in theory) and those living in neighbouring countries which do not have access to subsidised urea are the ineligible group. This essentially ensures that urea is smuggled into neighbouring countries from India. It is estimated that nearly 41 per cent of urea is diverted into neighbouring countries and for other industrial uses as well. This is not surprising, given the huge subsidy of 75 per cent on

it.[769]

With a huge amount of urea being diverted out of the country, farmers in states with borders with these countries find it difficult to buy urea at the government-stipulated price. Around 51 per cent of Indian farmers buy urea above the maximum retail price. In the three states bordering Bangladesh, all of the farmers have to buy urea at above the maximum retail price. Even in Odisha and Karnataka, which are nowhere near any international border, no farmer gets to buy urea at its actual price, as can be seen from Figure 12.8.

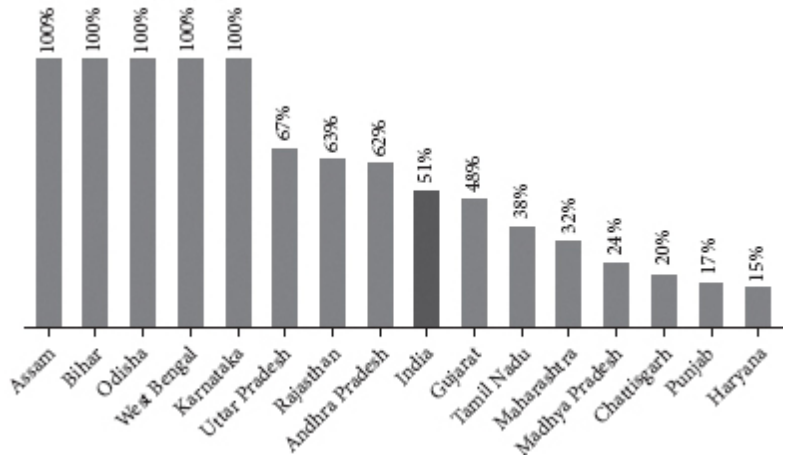
In Uttar Pradesh, which shares a border with Nepal, and in Rajasthan, which shares a border with Pakistan, the leakage rates are a very high 67 per cent and 63 per cent, respectively. The situation in this case is exactly similar to that of the foodgrains being distributed through the PDS. One estimate suggests that 46.7 per cent of the foodgrains get diverted into the black market. A similar story plays out with urea as well, given that the principle of one product-one price gets violated in both the cases.

The black market prices of urea are, on an average, around 61 per cent higher than the stipulated prices, i.e., the maximum retail price plus the local taxes on it. Given the fact that a huge amount of fertilizer makes its way into the black market, the government allows only three firms, namely, the State Trading Corporation of India (STC), the Metals and Minerals Trading Corporation of India (MMTC) and India Potash Limited (IPL), to import fertilizers into India.

India is dependent on imports in the case of phosphatic and potassic fertilizers. As far as phosphatic fertilizers are concerned, almost 90 per cent is imported. With no known commercially exploitable source of potash in India, the country is totally dependent on imports for potassic fertilizers.[770]

The trouble is that, if fertilizers have to be imported, the prospective demand needs to be projected. The Fertilizer Department goes about doing this every year. And, as happens in any case of central planning, things go wrong simply because it is very difficult to estimate demand from the whole market. The economist Friedrich Hayek called this the ‘knowledge problem’. He explained it in a seminal article called ‘The Use of Knowledge in Society’, which was published in the September 1945 issue of the *American Economic Review*.

Figure 12.8: State-wise percentage comparison of number of farmers who had to buy urea at prices above the MRP during 2012-2013.



Source: Economic Survey, 2015-2016.

As he wrote: "The economic problem of society… is a problem of the utilisation of knowledge which is not given to anyone in its totality."[771] How much fertilizer is needed is something that is known to each individual farmer and there is no way that the government can get access to this knowledge in totality.

The knowledge required to estimate demand is dispersed among many individuals, and not concentrated with a central authority like a government. As Matt Ridley writes in *The Evolution of Everything*: "The knowledge required to organise human society is bafflingly voluminous. It cannot be held in a single human head."[772]

Given this limitation of central planning, demand projections for fertilizers often do go wrong. This leads to shortages because fresh imports take time. From the time the Fertilizer Department of the government decides to import fertilizers till the time it reaches the end consumer is 60 to 70 days. The ensuing shortage leads to prices going up in the black market. This is something that happened in 2014, when slow imports pushed up the black market prices. Furthermore, this hurts the small farmers more than it hurts large farmers because large farmers are better connected, and hence, are able to buy subsidised urea.[773] Newsreports suggest that a few employees of the Fertilizer Department have also been involved in diverting urea to the black market.[774]

Earlier in the chapter, we saw that the sugar mills have no incentive to improve their efficiency, given that the sugarcane farmer is literally forced to keep selling to a mill in his area even if his previous dues have not been paid. A similar situation has emerged in the case of fertilizer companies as well. A company making fertilizer receives subsidies on the basis of the cost of production. Hence, the higher the cost of production, the higher the subsidy. Given this, there is no incentive for the company to lower its costs.[775]

What has also happened because of this is that manufacturing fertilizers is not much of a business model anymore. In order to be a viable business, the companies are totally dependent on the government. And if the government does not pay its subsidies on time, there is nothing really that they can do about it. Given this, it is not surprising that the total fertilizer production hasn't gone anywhere over the past decade and a half.

In 2000-2001, at the turn of the century, fertilizer companies operating in India produced a total of 14.7 million tonnes of fertilizer. By 2014-2015, this had gone up to around 16.6 million tonnes, an increase at the rate of 0.9 per cent per year. Hence, not surprisingly, the total amount of fertilizer imports went up at a very rapid rate. In 2000-2001, India had imported 4.3 million tonnes of fertilizers. By 2014-2015, this had jumped up to 8.3 million tonnes, an increase at the rate of 4.8 per cent per year.[776]

This is another impact of Big Government in the fertilizer sector. The funny thing is that this increase in fertilizer usage is not really reflected in the increase in production of foodgrains during the same period. Foodgrain production increased from 197 million tonnes in 2000-2001 to 265 million tonnes in 2013-2014 at the rate of 2.1 per cent per year. So what explains the increase in fertilizer demand? One explanation for this may lie in the increased smuggling of fertilizers into neighbouring countries. Another explanation may be the excess usage of fertilizers.

There has to be a certain balance in the use of various fertilizers, i.e., urea, phosphatic and potassic fertilizers. Agricultural scientists essentially recommend a ratio of 4:2:1 for Nitrogen (from urea), Phosphorous and Potassium in Indian conditions.[777] The ratio of NPK (Nitrogen, Phosphorus and Potassium) usage in 2013-2014 was at 9.7:2.7:1.[778] This was way off the mark from the recommended 4:2:1. In 2012-2013, the NPK usage ratio had stood at a still higher

9.9:3.3:1.[779]

Like any other average figure, the NPK ratio hides the states where the ratio is extremely high. Take the case of Punjab. The NPK ratio there is 56.7:13.5:1. Or take the case of Haryana, where the ratio is 60.6:12.7:1. Or Rajasthan, where the ratio is 179:54.2:1. In the case of Rajasthan, the consumption of potassic fertilizers is 0.2 kg per hectare on an average, against the national average of 10.55 kg per hectare.[780]

The primary reason for these out-of-whack ratios lies in the fact that urea prices continue to be controlled, whereas the prices of phosphatic and potassic fertilizers have been decontrolled. Take the case of DAP, which is a phosphatic fertilizer. Between 2010-2011 and 2013-2014, the price of this fertilizer went up by 147 per cent. Or take the case of MOP (0-0-60-0), which is a particular grade of potassic fertilizer, whose price went up by 251 per cent during the same period.[781]

The urea price, on the other hand, has been fixed at Rs. 5,360 per tonne for many years now. There is a subsidy of close to 75 per cent on it. This explains why farmers prefer to use urea over other fertilizers, given that it is comparatively cheap. But the excess use of urea comes with its own set of repercussions. It leads to the deficiency of secondary as well as micro-nutrients, to the overall detriment of the soil.

As the *Report of the Working Committee of the Fertilizer Industry for the Twelfth Plan* (2012-2013 to 2016-2017) points out: "The imbalanced [*sic*] use of chemical fertilizers and neglect of organic manure caused many problems, like stagnation in productivity, soil sickness, widespread deficiency of secondary and micro-nutrients, spread in salinity and alkalinity, etc. On an All-India basis, the deficiency of sulphur has been found to be 41 per cent; zinc, 48 per cent; boron, 33 per cent; iron, 12 per cent; and manganese, 5 per cent."

This deficiency of nutrients in the soil creates other problems. Take the case of the 48 per cent deficiency of zinc in the soil. This deficiency of zinc in the soil translates into zinc deficiency in food. This ultimately leads to stunted growth and the impaired development of infants.[782]

Furthermore, there has been a declining response of fertilizer use

on the production of foodgrains.[783] This basically means that more fertilizer is now required to produce the same amount of foodgrains than was the case in the past. As the *Report of the Working Committee of the Fertilizer Industry for the Twelfth Plan* points out: "Imbalanced [*sic*] nutrition produces low yields, low fertilizer use efficiency and low farmer profit. It also results in further depletion of the most deficient nutrients in the soil. Once the critical level of a nutrient is reached, [the] yield falls dramatically."

The excessive use of fertilizers, especially nitrogenous ones (urea is a nitrogenous fertilizer and contains 46 per cent nitrogen), has a negative effect on the environment. Part of the nitrogenous fertilizer applied is lost as gases in the form of Nitrogen (N_2) and Ammonia (NH_3). The nitrate (NO_3) that is released contaminates groundwater resources. One of the hazardous effects of the NO_3 contamination of groundwater is Methaemoglobinemia, or Blue Baby Syndrome. This leads to an abnormal amount of Methaemoglobin, a form of haemoglobin, being produced. Groundwater contamination is a huge problem in many states across India. [784]

The major reason for all these problems is the overuse of urea, especially in states like Punjab, Haryana, Uttar Pradesh and Rajasthan. The overuse is pronounced in comparison to the United States, many other Asian countries, and the world in general. Nevertheless, the overuse in China is even more than that in India (not that that helps India in any way). Also, this is not something that has been observed all across India. Many states in the North East use less nitrogenous fertilizers per hectare than the global average.[785]

Hence, subsiding urea costs the government a lot of money in the form of leakages into neighbouring countries as well as the black market. Over and above that, it leads to the massive overuse of urea in large parts of the country, which has a negative impact on the environment as well as foodgrain yield. The excessive use also causes fertilizer shortages, which the current import machinery is not geared up to tackle. So what can be done about all these problems?

Of course, there are no easy answers to them. What may be right economically may not be right politically, and vice versa. Nonetheless, one of things that can be done is that imports can be decanalised. This would allow more importers than just the three government firms which are currently allowed and take away the exclusive right to import which currently rests with these three firms. Given this, the

chances of fertilizer supply quickly responding to changes in demand are much better than is the case currently.

Another way is by ensuring that the demand for fertilizer is met by increasing domestic production. But, as mentioned earlier, given the fact that urea prices are highly subsidised and companies are dependent on timely payments from the government to make money, the chances of any private company entering the fertilizer sector continue to remain dim. Nevertheless, the government is trying to get public sector fertilizer companies to increase their production.

The government announced a new urea policy on May 25, 2015, with the aim of maximising indigenous urea production. Under this policy, the government plans to revive five defunct fertilizer factories of the Fertilizer Corporation of India and Hindustan Fertilizer Corporation. These factories would have a total production capacity of 1.27 million tonnes.[786] The hope is that, with increased domestic production, the government will have to import a lesser amount of urea. This would hopefully work out to be cheaper and, finally, lead to a lower subsidy bill.

Nevertheless, as we have seen in earlier chapters, the public sector enterprises are an inefficient lot on the whole, and, for all we know, the subsidy bills of the government might just go up or continue to remain the same instead of coming down. (Remember the Hindustan Fertilizer Corporation factory that we discussed earlier in the book and how inefficient it has been?)

One solution that has been implemented in order to tackle the problems plaguing the fertilizer sector is the *neem* coating of urea. This essentially entails spraying *neem* oil on urea. In the case of the conventional urea used by farmers, the usage efficiency is 30 per cent in the case of the rice-paddy crop and 50 per cent in the case of wheat. This basically means that 50 per cent to 70 per cent of the urea is lost by volatilisation/leaching. This leads to air pollution as well as groundwater pollution.[787]

When urea is sprayed with neem oil, the release of nitrogen is slowed down to the extent of 10 to 15 per cent.[788] This basically leads to the consumption of urea coming down by 10 to 15 per cent. In fact, research carried out by the Indian Agricultural Research Institute indicated an “increase in the rice grain yield by 6.3 per cent to 11.9 per cent with the application of *neem*-coated urea over normal

urea".[789]

Coating urea with *neem* oil also makes it difficult for black marketers to divert cheap subsidised urea for use in the chemical industries. In fact, urea is also used in states like Haryana and Punjab as an additive to milk in order to whiten it.[790]

In fact, on May 25, 2015, the government made it mandatory for all domestic producers of urea to *neem* coat 100 per cent of their production of subsidised urea. This was achieved as on September 1, 2015. Furthermore, 100 per cent of the imported urea had been *neem* coated by December 2015.[791]

This is expected to save the government some money, but as the Ministry of Chemicals and Fertilizers told the Lok Sabha in early August 2016: "It is too early to assess, at this stage, the details of the quantum of revenue saved from [using] *Neem*-Coated Urea."[792]

In 2016-2017, the total fertilizer subsidy was budgeted at Rs. 70,000 crore. Of this, the urea subsidy was budgeted at Rs. 51,000 crore. But this is an understatement, given that Rs. 40,000 crore of arrears to fertilizer companies had not been paid by the beginning of the financial year 2016-2017.[793] Hence, the actual fertilizer subsidy during the year should have been Rs. 1,10,000 crore. This is too huge an amount for the *neem*-coated urea innovation to make a substantial difference. As the economist Ashok Gulati put it in this context, "if you have an elephant and you start decorating the tail", it is very difficult to "change the appearance of the elephant".[794]

As the Fertilizer Association of India said in their 2014-2015 Annual Review of Fertilizer Production and Consumption: "The industry continued to suffer due to inadequate budget allocations, with a large amount of [the] unpaid subsidy dues [being] carried forward from one year to the next."

It is clear by now that a major part of the problems in the fertilizer sector are because urea prices haven't gone up in years and there is a huge 75 per cent subsidy on it. For an economist, the solution would be to raise the urea prices. If urea followed the principle of one product-one price, then there would be no way that it would get smuggled into neighbouring countries or sold in the black market for non-agricultural uses.

The trouble is that urea prices have been stagnant at Rs. 5,360 per tonne for many years now (since February 2010). Hence, the farmers are anchored into that price. The fact that urea is cheap is taken as a given. Any attempts to raise the price of urea would lead to huge protests. Even if prices are raised slowly over a period of time, the difference between the current subsidised price and the actual price of urea is way too huge not to attract any protests. Also, it is worth remembering here that subsidised urea is used more by large farmers, who also tend to be politically influential, and thus, come with a huge nuisance value. (Why do you think agricultural income continues to remain untaxed in India?)

One way to increase the price of urea is to increase the MSP of rice and wheat. This could make the solution politically feasible, given that input as well as output prices are being raised. But we need to see this in the total context of the subsidies being offered by the government and not just the fertilizer subsidies. The rice and wheat that farmers sell to the government are distributed through the PDS at a central issue price of Rs. 3 per kg for rice and Rs. 2 per kg for wheat.[795]

Higher MSPs would mean that the government would lose more money on the rice and wheat that it buys and distributes through the PDS. Furthermore, it would also lead to farmers sowing greater amounts of rice and wheat than they currently do. As discussed earlier, the government is already sitting on much more rice and wheat than it needs. Hence, what the government could save on its fertilizer subsidy by pricing urea correctly, it would lose on the foodgrains that it distributes through the PDS (possibly more).

So just reforming the fertilizer industry in isolation would not make any sense. The National Food Security Act would also have to be reformed. And how can that be done? We will come to that later in this chapter.

****

The government subsidy system, as it has evolved, is terribly leaky. The rice and wheat distributed through the PDS do not always reach those whom they are intended for. And the same is true for subsidised kerosene. The subsidised fertilizer also finds its way to those it is not meant for. Over and above this, the poor do not get the benefits of the major part of the subsidies.

In fact, as the Economic Survey of 2014-2015 pointed out: “Price subsidies are often regressive. By regressive, we mean that a rich household benefits more from the subsidy than a poor household.” Take the case of the kerosene distributed through the PDS. 41 per cent of it is lost due to leakage and only 46 per cent of what remains is consumed by poor households. 48 per cent of the sugar distributed through the PDS is lost due to leakage, and of what remains, households in the bottom three deciles[xx] consume 44 per cent. In the case of subsidised domestic cooking gas, the bottom 50 per cent consume only 25 per cent.

Hence, the subsidies are leaking and, at the same time, of what remains, the not-so-poor are taking in a substantial chunk. So what is the way out of this quagmire? Instead of trying to run a terribly leaky system, the government should simply hand over cash or coupons to the poor and let them decide what they want to do with it. It is important to realise that the principle of one product-one price should not be violated. It makes more sense to hand over coupons or cash to the poor so that they can buy foodgrains, sugar, kerosene, etc. at the market price.

The economist Kaushik Basu explains the coupon system in his book *An Economist in the Real World*.

The basic idea behind this is fairly simple. The current system basically entails the government handing over the subsidised goods to the PDS shopkeeper. The shopkeeper is, in turn, expected to pass on the subsidy in the form of cheap rice, wheat or kerosene to the intended beneficiary. But this, as we have seen, does not always happen.

Hence, the idea is to hand over the subsidy directly to the poor by handing over food coupons to those belonging to the BPL households. They can then use these coupons to buy food from any shop (not necessarily the PDS shop). The shopkeeper can take the coupon to the bank and exchange it for cash.

With the principle of one product-one price not being violated, the incentive to adulterate would also be less. Also, if one shopkeeper tries to adulterate a commodity, the buyers can always move on and buy from any other shop. Hence, the system would create some competition among the shopkeepers.

There are certain concerns expressed about this system. The

coupons can be counterfeited. But that happens with paper currency as well. Hence, a certain amount of counterfeiting always exists, but it does not paralyse the entire system. The same logic holds for food coupons as well.

Another concern expressed is what if households do not exchange coupons for food but sell them off and use the money to buy other products. Basu suggests that the selling of coupons should be legal. His logic is very straightforward. Even in the current system, where the government actually provides rice, wheat and kerosene through the PDS, there is no way of knowing whether the intended beneficiary is actually eating the rice/wheat or using the kerosene.

The extra bureaucracy that would have to be created in order to monitor whether the food coupons are actually being used to buy food would not be worth the trouble. Also, the term 'coupons' does not imply that actual paper coupons need to be handed out. Smart-cards can play the role as well. In fact, if you replace the word 'coupon' with cash, the basic logic remains the same.

Furthermore, there is this great belief among the well-off that giving money (directly or through coupons) to the poor would mean that the men will simply drink it away. This argument only sounds true because it plays on the stereotype of the poor being poor because they waste their time drinking and not working hard enough.

Nevertheless, as the economist Joseph Halon points out: "Poverty is fundamentally about a lack of cash. It's not about stupidity."[796] Hence, if the poor do get money under an unconditional cash transfer scheme, they wouldn't necessarily waste it on alcohol and tobacco. In fact, there is enough research from all over the world that shows this.

As Rutger Bergman writes in *Utopia for Realists*:

> The great thing about money is that people can use it to buy things they need instead of things that self-appointed experts think they need. And, as it happens, there is one category of product[s] which poor people do not spend their free money on, and that's alcohol and tobacco. In fact, a major study by the World Bank demonstrated that [in] 82 per cent of all researched cases in Africa, Latin America and Asia, alcohol and tobacco consumption actually declined.

In fact, there was a very strange but interesting experiment conducted in Liberia. The idea was to check out what would happen if you gave $200 to the shiftiest of the poor. To carry out the experiment, alcoholics, addicts and petty criminals were rounded up

from the slums. As Bergman writes: “Three years later, what had they spent their money on? Food, clothing, medicine and small businesses. ‘If these men didn’t throw away free money,’ one of the researchers wondered, ‘who would?’”[797]

In fact, a prestigious medical journal summed up the findings a few years ago when it said: “When the poor receive no-strings cash, they actually tend to work harder.”[798] So, there is enough evidence internationally to suggest that giving cash to people in need is a good idea.

How do things look on the Indian front? There have been a few pilot projects that have happened. In 2011, the Delhi government and SEWA (Self-Employed Women’s Association) carried out a cash transfer programme for BPL families in West Delhi. They essentially tested the impact of substituting rations given under the PDS with cash transfers. The results were fairly encouraging. It was found that the consumption of pulses, eggs, fish and meat went up. Furthermore, alcohol consumption did not increase. And lastly, the efficiency of the PDS shops went up.[799] This happened because people were no longer dependent on the PDS shop to buy what they needed.

Another cash transfer scheme which has been tried at a much larger scale is PAHAL (the Pradhanmantri LPG Yojana). The cooking gas cylinders sold for domestic consumption are subsidised. In August 2016, the subsidy stood at Rs. 63.90 per cylinder. Earlier, subsidised cylinders were sold at a lower price and, in the process, violated the principle of one product-one price.

Commercial establishments were ineligible for the subsidy. They had to pay the market price along with central and state taxes, which amounted to 30 per cent of the price, on an average. Hence, not surprisingly, a significant portion of the domestic cooking gas cylinders were diverted into the black market, where they were bought by small hotel owners, who had to otherwise pay a much higher price for them. This was done at times by creating fake household accounts against which subsidised cooking gas was bought and sold in the black market.

The cash transfer scheme for domestic cooking gas was first launched in June 2013 and then suspended by the Congress-led United Progressive Alliance government. It was relaunched in November 2014 in 54 districts. The scheme basically pays the subsidy

amount directly into the bank account of an individual within a period of three days. People have to buy a cooking gas cylinder at the full price. The scheme became pan-Indian from January 1, 2015 onwards.

It is estimated that the scheme has more than 15.1 crore beneficiaries and around Rs. 29,000 crore has been transferred into their bank accounts.[800] Given that consumers buy cooking gas at the full price, the principle of one product-one price is not violated. Hence, there is lesser incentive for operators to divert domestic cooking gas to commercial establishments in the black market.

Furthermore, in order to carry out the cash transfer (or direct benefit transfer, as the government calls it), the government links *Aadhaar*-enabled bank accounts with the consumer numbers. This helps in eliminating ghost accounts. As the Economic Survey of 2015-2016 points out: "The PAHAL scheme has been a big success. The use of *Aadhaar* has made black marketing harder, and LPG leakages have reduced by about 24 per cent, with limited exclusion of [the] genuine beneficiaries."

The Economic Survey was published in February 2016. After that, several claims were made regarding the total amount of money that the government was saving due to PAHAL. In June 2016, the Finance Secretary, Ashok Lavasa, said that the government had saved Rs. 14,872 crore by paying the subsidy amount from the PAHAL scheme directly into the bank accounts of people.[801]

A CAG Audit Report on PAHAL published in August 2016 eventually pointed out that, while there were some savings from PAHAL, they were nowhere near the claims being made by the government as well as the oil marketing companies which sell cooking gas cylinders.

In the report, the CAG said that the reduction of Rs. 23,316 crore in the cooking fuel subsidy for the first three quarters of 2015-2016, in comparison to 2014-2015, was largely due to a sharp fall in oil prices, and not due to the PAHAL scheme.[802]

As the report pointed out: "While implementation of [the] PAHAL scheme coupled with the LPG 'Give It Up' campaign has resulted in the reduction of off-take of domestic subsidised LPG cylinders, the resultant savings… [were] not as significant as that generated through [the] fall… [in] subsidy rates."

The CAG said that the savings due to the implementation of PAHAL were only Rs. 1,764 crore. The remaining Rs. 21,552 crore fall in cooking gas subsidies was largely due to a fall in oil prices. Another interesting point that the CAG made was that, while calculating the fall in the subsidy, the national average off-take of 6.27 cylinders a year should have been used, and not the maximum number of 12 subsidised cylinders that consumers are allowed as a subsidy during the course of a year. [803]

Thus, in their zeal to sell the effectiveness of these reforms, the Narendra Modi government has perhaps ended up over-reporting the savings from PAHAL. But, given the distrust for any sort of economic reform in India, this step could have been avoided. If PAHAL had led to savings of only Rs. 1,764 crore and the government had reported the correct number, then that in itself would have been a good beginning. By doing what it did, the government gave an opportunity to nay-sayers to say 'We told you that economic reforms don't work in India'. And that is not a good message to spread.

Also, it needs to be underscored here that the good thing is that a system to effectively pay the subsidy on domestic gas cylinders is finally in place. The true utility of this will be felt once oil prices start to go up again. They have been rather subdued over the past two years. The fact that a system is in place is itself a huge thing in the Indian context, and that needs to be recognised.

Another point needs to be made here. Research shows that, in districts where the cash system transfer was first introduced, the black market prices spiked up by almost 30 per cent. This was largely because cylinders were now sold to domestic consumers at the market price. At the same time, ghost accounts were eliminated because the *Aadhaar*-enabled bank accounts were linked to the consumer numbers.

At the same time, the sale of commercial cooking gas cylinders went up by just 6 per cent. This figure was surprisingly low. Also, the sale of non-subsidised domestic cooking gas cylinders shot up. While each household is allowed to buy only 12 subsidised cooking gas cylinders during the course of a year, nevertheless, there is no limit to the number of unsubsidised cylinders that it can buy. The way the tax laws are structured, the unsubsidised cooking gas cylinders are still around 30 per cent cheaper than the commercial cooking gas cylinders.[804] This is another violation of the one product-one price principle, which needs to be corrected if the government is serious

about cutting down on leakages in domestic cooking gas.

Also, as mentioned earlier, the average national consumption of domestic cooking gas is 6.27 cylinders a year. But the maximum number of subsidised cylinders allowed during the course of a year is nearly double, at 12. This anomaly needs to be corrected. In fact, the consumption of domestic cooking gas goes up in March every year. This is primarily because March is the last month of the fiscal year, and distributors have a very strong incentive to invoice unconsumed subsidised cylinders to households and then resell it in the black market.[805]

Hence, the government could look at reducing the number of subsidised cylinders allowed during the course of any year to 10 in two instalments, first by reducing it to 11 and then to 10. This would make it politically more convenient.

Other than suffering from under-recoveries while selling domestic cooking gas, the oil-marketing companies also suffer under-recoveries while selling kerosene. In August 2016, the under-recovery on kerosene was Rs. 11.50 per litre. Hence, not surprisingly, the leakage in the case of kerosene distributed through the PDS is at a very high 41 per cent. Much of this leaked kerosene is used to dilute diesel. This increases the pollution to the environment caused by fuel. Other than this, it also costs the government a lot of money, given that the oil-marketing companies need to be compensated for their under-recoveries on this front. In 2013-2014, the under-recoveries on kerosene were at Rs. 31,255 crore. This had fallen to Rs. 11,496 crore in 2015-2016 due to a fall in oil prices.[806]

This huge wastage of money needs to be eliminated. A part of it can be done by transferring cash into the bank accounts of people who until now have been buying subsidised kerosene. On August 1, 2016, the government announced that it had decided to introduce the direct benefit transfer scheme for kerosene in 39 districts spread across nine states of the country (Punjab, Gujarat, Himachal Pradesh, Madhya Pradesh, Chhattisgarh, Rajasthan, Jharkhand, Haryana and Maharashtra).[807]

This is a step in the right direction. By starting small, the Modi government can see what issues arise, correct them along the way, and then roll out the scheme nationally. Until now, the government has introduced cash transfers only for the products which come under

the petroleum subsidy. It has stayed away from introducing cash transfers for the food and fertilizer subsidies. One reason is that, politically, this is a tricky thing. Hence, the government first wants to be on a strong footing by successfully implementing the cash transfer programme for domestic cooking gas as well as kerosene.

Nevertheless, if leakages of government subsidies are to be brought down in the years to come, it is necessary that both food and fertilizer subsidies move towards the cash transfer system. While petroleum subsidies (essentially subsidies on domestic cooking gas and kerosene) go up and down depending on the price of oil, the same cannot be said in the case of food and fertilizer subsidies. It needs to be stated that both food and fertilizer subsidies are understated to the extent of the money that the government has not paid the FCI and fertilizer companies at the end of each financial year.

Table 12.5 clearly shows that the petroleum subsidies have fallen over the years since 2012-2013, due to falling oil prices. Also, the government is moving towards cash transfers when it comes to petroleum subsidies in a slow and steady way. Fertilizer subsidies have moved within a certain range. The biggest subsidy right now for the government is the food subsidy. And this is costing the nation in multiple ways.

Table 12.5: Government subsidies (in Rs. crore) for food, fertilizers and petroleum over the past five years.

Subsidy Type	2016-17*	2015-16**	2014-15	2013-14	2012-13	2011-12
Food	1,34,835	1,39,419	1,17,671	92,000	85,000	72,822
Fertilizers	70,000	72,438	71,076	67,339	65,613	70,013
Petroleum	26,947	30,000	60,269	85,378	96,880	68,484

* Budget estimates.

** Revised estimates.

Source: www.indiabudget.nic.in.

A lot of it gets leaked and does not reach those it is intended for. Farmers are producing more and more rice and wheat and not enough of other crops like pulses and oilseeds. In fact, food subsidies in 2011-2012 were at 0.83 per cent of the GDP (the 2011-2012 GDP at current prices and using the new GDP series). By 2015-2016, this had jumped to 1.03 per cent of the GDP.

The government has run a few pilot projects when it comes to replacing the food subsidy as it is currently offered with cash transfers. One such experiment has taken place in Chandigarh. Chandigarh is the capital of the states of Punjab and Haryana and is a union territory which is governed by the central government.

The results have not been too encouraging. The project started in September 2015. As the senior journalist and author Seetha pointed out in a newsreport: "'Since September [2015], I have not got either foodgrains or cash; how are we to manage?' is the common lament of women from extremely poor backgrounds. They are either domestic servants or casual labourers or wives of migrant labourers, hawkers or repairmen. Those who are getting money regularly insist it is not enough. (The cash subsidy has been fixed at Rs. 95 per individual.)"[808]

One major problem that has come to light concerns the number of applicants. The union territory had around 81,123 ration card holders under the targeted PDS, which the National Food Security Act had replaced. Nevertheless, only 56,689 applications were received for enrolment under the new Act. This was around 25,000 less than the earlier number.[809]

The reasons for this are not very clear. Activists have pointed out that the union territory administration did not publicise the enrolment exercise as extensively as the administration claims it had. Furthermore, the drive was carried out during a period when most migrant labourers had gone back to their villages. The union territory adminis tration does not agree with this. As Bhawna Garg, Secretary, Food and Supplies, pointed out to Seetha: "The enrolment was not a one-shot exercise, but is an ongoing one."[810]

Also, another factor going against the cash transfers are the people who had benefited from the system as it had existed earlier. These include the shopkeepers who were running the shops which were a part of the PDS. They seem to be capitalising on the fact that the cash transfer system is not working well by telling people that at least they used to get something earlier.

As Seetha writes: "Ironically, there is now nostalgia for the early PDS, even from those who used to complain about its flaws. '*Anaaj chahiye, paisa nahin*' (We don't want money; we want foodgrains) [and] '*Purana system theek tha*' (The old system was better) are two

other common refrains. Closer questioning has them admitting that things were not hunky dory earlier. So, there could be a better-the-known-devil-than-the-unknown-angel syndrome at work."

There are multiple points that arise here. One is that the cash transfer system is radically different from the way in which things were being done earlier. Hence, there has to be a huge effort undertaken on the part of the government to explain the new way of doing things to the people. The trouble is that in India economic reforms have never been explained to the people. It has always been reform by stealth. But that won't work in this case, given that it will impact such a huge number of people. Hence, the cash transfer system will have to be explained to the people of this country. And these explanations will have to come from the highest level in the government, including the Prime Minister.

The second point is that the subsidy system, as it currently prevails, benefits a small number of people who are a part of the chain that is used to distribute the subsidy. In the case of food subsidies, these are the people who own the fair-priced shops that make up the PDS that is used to distribute foodgrains as well as kerosene. Until now, they have had a good time by selling a major part of the foodgrains as well as kerosene to the black market and making *easy money* in the process. Their interest is in ensuring that the current system does not change and that the *status quo* remains. This is also in the interests of the bureaucrats who supposedly monitor these shops that make up the PDS.

As Seetha points out: "In Chandigarh, ration shop owners who found their business gone overnight were at the forefront of fuelling opposition to the cash transfers."[811] These rentiers of the system have a huge nuisance value. And dealing with this nuisance value will be a very important and difficult part of ensuring that the cash transfer system is implemented across the country.

A second pilot project has been run in Puducherry. Here, the results are a little better than in Chandigarh. The people in the union territory were earlier unhappy with the poor quality of the rice that they used to get from the FCI through the ration shops. The cash transfer gives them an opportunity to buy better quality rice. Nevertheless, at the same time, the cash transfer is not enough to buy all the rice that they consume during the course of the month.

The pilot project in Puducherry also started in September 2015. The cash transfer has been set at Rs. 24.05 per kilogram of rice. This means that an AAY-card holder gets Rs. 841.75 per card (35 kg multiplied by Rs. 24.05), whereas non-AAY cardholders get Rs. 120.25 (5 kg multiplied by Rs. 24.05) per family member.[812] The trouble is that, at Rs. 24.05 per kilogram of rice, the money is clearly not enough.

As Seetha points out: "The market price of the poorest quality broken rice is around Rs. 30 a kg while the subsidy amount is set at Rs. 24 a kg. Unbroken rice costs anywhere between Rs. 35 and Rs. 45 a kg."[813] This is something that people have been complaining about. Nevertheless, they are happy that the days of the FCI rice are over.

Another problem that has arisen is that of failed payments into the bank accounts of people. This is something that the experiment in Chandigarh is facing as well. As Seetha writes: "The administration admits [that] there are more than a thousand failed transactions every month, starting with over 6,000 in the first month (September 2015) to over 2,000 in May 2016. Unfortunately, the administration comes to know about failed transactions and the reasons quite late. '*There have been 18,000 failures since September; it has taken us months to know the reason. Without knowing why they failed, how can I rectify the problem*?' [emphasis original] asks P. Priytarshny."[814] (Priytarshny is the Additional Secretary-cum-Director of the Department of Civil Supplies and Consumer Affairs in the Puducherry government.)

In one particular case, the money was going into the Grameen Bank account of a beneficiary. The beneficiary was unaware of this. He had been checking the account which he had informed the Civil Supplies Department about. This is a problem which is related to the Public Finance Management System–National Payments Corporation of India interface. Basically, money goes into the account that is the latest to be seeded with *Aadhaar* without the knowledge of the beneficiary.[815]

The bureaucracy in Puducherry is tackling these problems. And therein lies a lesson as well. For the cash transfer programme to work, the state-level bureaucracies will have to take an active interest in sorting out the initial problems. Also, it would mean cooperation from the banking system as well. The people into whose accounts money is going need to be given ATM cards so that they can withdraw money from ATMs instead of spending a lot of time going to the bank in

order to withdraw money to buy the rice and wheat that they need.

There is another lesson that we can learn from Puducherry. Unlike in Chandigarh, in Puducherry there was no problem in identifying the beneficiaries. This was because the beneficiary lists as well as the PDS have been computerised for more than two years now. This wasn't the case in Chandigarh. Hence, there is no point in starting cash transfer programmes unless computerised systems are in place.[816] The larger point being that, as usual, implementation will be the key, and that is something that the various Indian governments over the years have never really been good at on the whole.

Furthermore, for the cash transfer programme to work, state governments will also have to take an active interest. Just the central government pushing it won't work. After all, a cash transfer system won't evolve overnight and can take many years to implement. It would require huge commitment levels from the politicians at the national level. This would mean not just looking at short-term electoral interests but also keeping in mind what is good for the country in the long run. And therein, sad to say, lies the basic disconnect.

****

In fact, cash transfers need not work at just the distribution end of the foodgrains distributed through the PDS. In August 2016, the Odisha government decided to move on to cash transfers directly into bank accounts for the rice paddy acquired from farmers in 134 blocks.[817]

For this, the government has made seeding *Aadhaar* card numbers into bank accounts mandatory. As more and more *Aadhaar* numbers are linked to bank accounts, the state plans to move towards cash transfers for food security, social welfare as well as employment guarantee schemes.[818]

In fact, cash transfers are to be introduced across more and more government schemes, and for this the *Aadhaar* number needs to be seeded into bank accounts, establishing the unique identity of the beneficiary. An *Aadhaar* card is necessary in order to identify the right beneficiary. This helps in eliminating bogus identities, through which people can claim subsidies. So, for the government to be able to transfer money to individuals, the *Aadhaar* card needs to be linked to a bank account.

A lot of progress has been made as far as the issuance of *Aadhaar* cards is concerned. As the Economic Survey of 2015-2016 points out: "The current government has built on the previous government's support for the *Aadhaar* programme: 210 million (21 crore) *Aadhaar* cards were created in 2015, at an astonishing rate of over 4 million (40 lakh) cards per week. 975 million (97.5 crore) individuals now hold an *Aadhaar* card – over 75 per cent of the population and nearly 95 per cent of the adult population."

So the coverage of *Aadhaar* is more or less universal, and those who still remain to be covered should end up being covered very soon. But the same cannot be said about bank accounts. Nevertheless, rapid progress is being made on this front as well under the Jan Dhan Yojana Scheme.

As of August 10, 2016, 23.6 crore bank accounts had been opened under the Jan Dhan Yojana scheme. The accounts have a total balance of Rs. 41,723 crore.[819] This is a huge jump from the 5.3 crore bank accounts that were operational as of the end of September 2014. Also, nearly 3 lakh accounts were opened per day under Jan Dhan Yojana in 2015.[820] Even after this rapid progress, a lot still remains to be done on this front.

As the Economic Survey of 2015-2016 points out: "Despite Jan Dhan's record-breaking feats, basic savings account penetration in most states is still relatively low – 46 per cent on average and above 75 per cent in only 2 states (Madhya Pradesh and Chhattisgarh)." The Economic Survey was published in February 2016. Given that some time has elapsed since then, the figures quoted above would have improved since then. What also does not help is the fact that only 27 per cent of villages have a bank within a distance of 5 kilometres. This means that last-mile connectivity is a problem. This problem should be addressed to some extent with the RBI issuing fresh licences for 11 payment banks and ten small banks. It can also be addressed by taking advantage of India's very good mobile penetration levels and making greater use of mobile payment technology.

Hence, the point is that rural India is still not ready for cash transfers. At least, not yet. This means that replacing subsidies with cash transfers in rural areas, however much sense that makes, will have to wait.

****

The economists Ashok Gulati and Pritha Banerjee feel that, instead of pricing urea at lower than its real price, the government should simply make a cash transfer of Rs. 6,000-7,500 per hectare. This amount has been obtained by taking the fertilizer subsidy amount of more than Rs. 1.1 lakh crore (the amount stated by the government plus the arrears that remain unpaid) and dividing it by the 140 million hectares of net sown area. This works out to around Rs. 7,857 per hectare. Nevertheless, given that the subsidy amount has been outstanding for the past few years, an approximate figure of around Rs. 6,000-7,500 per hectare could be taken as the subsidy amount.[821]

At the same time, it needs to be ensured that small and marginal farmers get the bulk of the subsidy. Gulati and Banerjee suggest that the subsidy paid through cash transfers should be higher for farmers with less than four hectares of land. The trouble is that, given the state in which land titles are in India, it is very difficult to identify precisely who the small and marginal farmers are.

A better way out of this, at least till cash transfers become the order of the day, is to follow the domestic cooking gas model and limit the number of bags per farmer. This would ensure that the small and marginal farmers get the urea that they require at a subsidised rate. At the same time, the larger farmers would have to pay the market rate for the urea that they buy. This could be carried out through a biometric pointof-sale authentication. This approach has been tried successfully for foodgrains as well as kerosene in Andhra Pradesh. Having a biometric authentication would also ensure that the subsidised fertilizer doesn't get diverted into the black market and reaches those it is meant for.

The Economic Survey of 2015-2016 calls it BAPU, or Biometrically Authenticated Physical Uptake. In fact, this could be a viable solution in rural areas until they are ready for cash transfers. The average state preparedness for BAPU is 12 per cent. But some states, like Andhra Pradesh, at 96 per cent (the new Andhra Pradesh, since Telangana's preparation is abysmally low, at 0.1 per cent), and Chhattisgarh, at 42 per cent, are reasonably well prepared for it.

The major challenge here would be to get point-of-sale biometric machines installed at shops which sell the subsidised fertilizer. Nevertheless, this is something that the local government can easily deal with.

Having said that, financial inclusion as well as mobile penetration in the larger cities is much better today. And that is where things need to start. Given this, the Shanta Kumar Committee has recommended that cash transfers be introduced by starting with the "large cities with more than 1 million [10 lakh] population, extending it to grain-surplus States, and then giving [the] option to deficit States to opt for cash or physical grain distribution". The Committee has also said that the "cash transfers can be indexed with inflation" and "given to the female head of the family".

This, I believe, is the right way forward.

[xviii] The pie chart figures add to slightly more than 100 per cent due to rounding-off errors.

[xix] A period of three consecutive years.

[xx] Assuming that the data is arranged in increasing order of magnitude, the first (and lowest) decile is the ten per cent level. Thus, the third decile represents the thirty per cent level, and so the bottom three deciles represent the lowest thirty per cent of the data.

13.THE RIGHT TO WORK?

MNREGS

> To dig holes in the ground, paid for out of savings, will increase not only employment, but the real national dividend of useful goods and services. It is not reasonable, however, that a sensible community should be content to remain dependent on such fortuitous and often wasteful mitigations… once we understand the influences upon which effective demand depends.
>
> – JOHN MAYNARD KEYNES

In May 1950, the writer Mulk Raj Anand had a conversation with BR Ambedkar. During the course of this conversation, Ambedkar described capitalism as the "dictatorship of a private employer". In the same conversation, Anand asked Ambedkar, who happened to be the Chairman of the Constitution Drafting Committee, which had drafted the Constitution of the newly Independent India, why the right to work had not been made a fundamental right.[822]

To this, Ambedkar replied: "I was only one of the members of the drafting committee."[823] In Independent India, the right to work was a part of the Directive Principles of State Policy. As per Article 37 of the Constitution, the provisions contained in the Directive Principles were not enforceable by any court. At the same time, the Article also stated that these principles were "fundamental in the governance of the country and it shall be the duty of the State to apply these principles in making laws".

Hence, it was the responsibility of the state to strive to achieve these principles. Some of the principles were as follows:

a) Citizens, both men and women equally, have the right to an adequate means of livelihood.

b) There should be equal pay for equal work for both men and women.

c) Children should be given the opportunities as well as the facilities to develop in a healthy manner.

d) The right to work, to education and to public assistance, in

certain cases, should be guaranteed to all.

e) There should be a uniform civil code for all citizens.

A step towards the legal enforcement of the right to work was taken by the passage of the National Rural Employment Guarantee Act (NREGA). Parliament passed this Act on August 23, 2005. It was notified through the Gazette of India (Extraordinary) Notification dated September 7, 2005. A little over four years later, on October 2, 2009, an amendment was made to the Act. The NREGA was renamed as the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA).

The mandate of MGNREGA is to provide at least 100 days of guaranteed work during the course of a financial year to adult members of every rural household who are willing to do unskilled manual work. The idea is to "enhance the livelihood security of the rural poor through the generation of wage employment opportunities in works, leading to the creation of durable assets".[824]

The MGNREGA was launched in phases. From February 2006 onwards, it was first implemented in 200 districts. It was then extended to 113 more districts on April 1, 2007, and a further 17 districts on May 15, 2007. With effect from April 1, 2008, the remaining districts were also brought under the Act.

Currently, the scheme covers 625 districts in the country with a substantial rural population.[825] Here are some of the relevant characteristics of the scheme:

a) The Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) was created as a means to implement the Act.

b) The various state governments which actually implement the scheme have the power to make rules and amend the state-specific schemes.

c) The scheme is self-selecting, i.e., only those who want to do manual unskilled work can volunteer for it.

d) The Act provides a legal guarantee for wage employment. Work has to be allocated within 15 days of an individual submitting an application or "from the date when work is sought in case of an advance application, whichever is

later".[826]

e) If work is not provided within the sanctioned period, an unemployment allowance needs to be paid. This allowance amounts to 25 per cent of the minimum wage for the first 30 days and 50 per cent of the minimum wage after that. [827] f) If the employment is provided beyond a five kilometre radius, the individual has the right to a 10 per cent extra wage.

g) Any decision regarding the choice of work to be undertaken needs to be made in open assemblies of the Gram Sabha. The Gram Sabha is basically the meeting of all adults (people over 18 years of age) in an area covered by the Panchayat. The Gram Panchayat needs to ratify the plan. At the same time, the Gram Sabha has the right to monitor the execution of the work being carried out within the Gram Panchayat.

h) As far as possible, the work which is carried out under the MGNREGS needs to be performed manually without the use of any labour-displacing machines. The idea, of course, is to use India's natural comparative advantage of unskilled and low-skilled labour for work. In fact, the Act does not allow contractors to carry out any work.

i) Every household applying for work needs a job card. Any adult in the household can apply for a job card. A job card contains a list of names of the members of the household along with some basic demographic information as well as blank pages in order to record the work carried out and the payments made.[828] The process of verification for this is carried out by the Gram Panchayat, which basically needs to look into whether the applicant lives locally. At the same time, it needs to check whether the applicants are adults.

j) It is the job of the Gram Panchayat to conduct periodical surveys to assess the demand for work. It needs to develop a shelf of projects and the order in which they need to be taken up. This needs to be submitted to the state government. In fact, as per Sections 16(3) and 16(4) of the Act, every Gram Panchayat needs to make a development plan. The development plan needs to have the following components: 1) An assessment of the labour demand in the panchayat; 2) Identification of the works which will be enough to meet the

labour demand; 3) Estimation of the cost of the works as well as the wages; 4) Estimation of the benefits in terms of the employment generated as well as physical improvements.[829]

> While making the development plan, the Gram Panchayat needs to ensure that the estimated number of projects be much more than the estimated demand. The development plan should estimate the benefits of the employment that it generates in terms of person days. It should highlight the physical improvement that is envisaged, measurable in specific units. It should also highlight the benefits to the community.[830]

> All such plans from across the state are aggregated, and the state government is expected to submit a labour budget to the central government by December 31 of every year. On the basis of this, followed by some discussion, the central government allocates money to the state for the MGNREGS for the next financial year.

k) At the block level, the programme officer acts as the coordinator for the MGNREGS. A block is a subdivision of a district. Typically, the block development officers are designated as programme officers as well. One of the major responsibilities of the programme officer is to ensure that wages are paid to all labourers who participate in the MGNREGS. It is also his responsibility to ensure that unemployment allowance is paid if the employment is not offered on time. He also needs to ensure that the surveys to estimate work demand are carried out. At the same time, he needs to maintain a proper record of the resources received, released and spent under the MGNREGS in his block. He also needs to receive the project proposals from the Gram Panchayats, consolidate them into a block plan and pass them on to the District Panchayat.[831]

> Over and above this, the programme officer needs to liaison with banks and post offices and help in the opening of new accounts. He needs to ensure that timely payments are made to the labourers and that any grievances are redressed within seven days.

l) The other important functionaries in the MGNREGS are the Gram Rozgar Sahayaks (GRSs) (employment guarantee assistants) and mates, or worksite supervisors. The GRSs essentially run the MGNREGS in a village. They are responsible for overseeing the process of registration, the distribution of job cards and the allocation of work to villagers who have applied for work. They need to facilitate Gram Sabha meetings themselves. Over and above this, it is the GRS's responsibility to record the attendance of the labourer every day at the worksite, either himself or working through the mate. The mate, on the other hand, is supposed to be a worksite supervisor. The Act mandates at least one mate to be present for every 100 workers. At the same time, the mate cannot be a worker at the same worksite at the same point of time.[832]

> The mate is the last line of the government interacting with the workers on a regular basis. Other than supervising workers, he needs to record daily attendance on a muster role, update entries in job cards, ensure that there is no free-riding within the group of workers, help illiterate labourers in his group to learn to sign and to calculate wages earned, and create awareness about workers' rights under the MGNREGA, among other things.[833]
>
> The information of the work carried out, which is recorded in muster roles by the GRSs or the mates, is sent to the block offices, where it is digitised. The state governments as well as the central government reimburse local governments on the basis of these electronic records.[834]

m) The Act also clearly specifies that the labour budget should form at least 60 per cent of the total works to be taken up by the Gram Panchayat. The material cost cannot be more than 40 per cent. This ratio needs to be maintained at the block level as well. Over and above this, a maximum of 6 per cent is allowed as an administrative cost. At least a third of this amount needs to be used at the Gram Panchayat level to employ and pay the GRSs and meet other administrative expenses.[835]

n) The Act also specifies the kind of works that should be carried out. This includes water conservation and water-harvesting structures to improve groundwater supplies, micro- and minor irrigation works, renovation and maintenance of

drains and irrigation canals, land development works on common land, etc. The Act also allows rural sanitation works, such as individual household latrines, school toilet units, etc. Rural roads to unconnected villages and *pucca* internal roads can also be constructed. Construction of buildings for Gram Panchayats, cyclone shelters, village *haats* and crematoria are also allowed.[836]

> In fact, there is a list of negative works as well, i.e., works that are not allowed under the Act. This includes works like removing grass and shrubs, agricultural operations, etc., which are essentially works which are not measurable. Nevertheless, these works are allowed if they are a part of converting uncultivable/barren land into cultivable land. They are only not allowed as stand-alone activities.[837]

> Furthermore, the asset being built through the work carried out needs to be durable and it needs to be constructed conforming to sound engineering standards "in terms of design, materials and workmanship".[838]

o) The worksite should have facilities like the availability of drinking water, a first-aid box and shade for periods of rest. If the number of women working at the worksite and accompanied by children is five or more, then there should be a woman worker available to look after the children.

p) As far as payments are concerned, the Act specifies that the payment of wages against the work carried out should be made into the bank accounts or the post office accounts of the labourers. If the penetration of banks or post offices in a particular area is weak, then payments can also be made in cash. The Act specifies that every attempt should be made to video record the cash payment process. It is up to the wage seeker which kind of account (scheduled commercial banks / regional rural banks / post offices / mobile banks) he or she wants. The payment of daily wages needs to be carried out on a weekly basis and not later than a fortnight "after the date on which the work has been carried out".[839] In the case of any delay in the payment of wages, a compensation of 0.05 per cent of the unpaid wages per day will have to be paid from the sixteenth day onwards.

Furthermore, Paragraph 31 of the Act mandates that there shall be no discrimination in the payment of wages on the basis of gender. In fact, this clause was supposed to empower women. Before the MGNREGA was passed, the state of Maharashtra had an Employment Guarantee Scheme (EGS). Several studies have been carried out on Maharashtra's EGS. One of the studies concluded that the payment of equal wages to men and women was a major reason why the scheme was so popular among women labourers. Another study concluded that the equal payment gave women a taste of freedom and that helped them develop a sense of confidence.[840]

The economist Jean Drèze, writing in an essay titled 'Employment Guarantee and the Right to Work', felt that the MGNREGA would play a significant role in curbing gender discrimination as well as empowering rural women, especially in states like Bihar and Uttar Pradesh, where women are traditionally homebound.[841]

q) The accounts of the MGNREGS at the district level are supposed to be audited by Chartered Accountants (CAs). The CA firms are supposed to identify gaps and make suggestions for improvements. They also need to certify whether the funds allocated to the MGNREGS have been spent on only admissible activities.

r) At the Panchayat level, a social audit needs to be carried out. This audit has to be carried out by people in coordination with the local administration. The social audit includes an audit of the quality of the work being carried out along with the number of labourers employed as well as the materials that are used. It needs to be conducted at least once in every six months. Once the audit is done, the Social Audit Gram Sabha is supposed to be video recorded and uploaded onto the web.[842]

At the local level, the Act also proposes a Vigilance and Monitoring Committee. This committee should consist of ten members, five of whom shall be women. Over and above this, the committee should also have members from the scheduled castes and scheduled tribes in proportion to their population. The basic function of this local-level vigilance committee is to act as a forum for a concurrent social audit. Other than the

> local-level vigilance committee, a district-level vigilance cell and a state-level vigilance cell are also supposed to be in place. The state-level vigilance cell is supposed to conduct regular field visits to detect irregularities. It is also supposed to take *suo motu* action on reports which appear in the media. The district-level vigilance cell is supposed to carry out the directives of the state-level vigilance cell.[843]

These were some of the relevant characteristics of the scheme. The reason I have gone into them in so much detail is to show that, just like other Big Government programmes, the MGNREGS is also high on intent and ambition, but it does not take into account the implementation capabilities of the local government.

****

A good way to think about the ambitions of Big Government is to think of a funnel which is very wide at the top and very narrow at the bottom. When any programme is being planned at the central government level, each ministry has access to resources which it can call upon to design the scheme and stipulate conditions for the disbursement of money under the scheme. The trouble is that the disbursement as well as the monitoring have to be carried out at the local government level.[844] And this is where the ambitions of Big Government start to unravel.

As Sandip Sukhtankar and Milan Vaishnav write in 'Corruption in India: Bridging Research Evidence and Policy Options':[845]

> What the relatively small number of public employees [as we have seen in Chapter 1] means for a country of India's size is that the administrative service has an enormous burden placed on it to not only implement the plethora of schemes and regulations in place but also to enforce them. For example, the chief administrative officer of the most relevant administrative unit for implementing public programmes in India – the district collector – is also the official in charge of law and order in a district, which has an average of 2 million [20 lakh] inhabitants. While these officers are selected from the cream of the crop of the Indian Administrative Service (IAS), given the enormous burden placed on their shoulders, the decks are stacked against them from the beginning. Compounding the administrative burden [that] they face, officers regularly face political interference.

The trouble is that very few states have the administrative capacity to implement the 200 plus schemes sponsored by the central government. Implementing a scheme essentially means accessing the grants, spending the money as per the stipulated conditions,

maintaining separate accounts and then submitting reports to the central government. In fact, this capacity is even lower in states which actually need these schemes the most. As Devesh Kapur writes in an essay titled 'The Political Economy of the State', what makes monitoring schemes difficult is not just the limitations of the monitors but the "sheer number and dispersion of schemes across communities and locations".[846]

****

So how has the MGNREGA performed over the years? It has been close to ten years since it was first implemented. The economist Surjit Bhalla calls the MGNREGA the fourth most corrupt institution in the world, after FIFA, BCCI and the Public Distribution System (PDS).[847]

While FIFA and BCCI are not relevant to this book, we have seen how corrupt the PDS, which the government uses to implement the right to food security, actually is. Bhalla offers more than a few reasons to bolster his argument.

In 2009-2010, which was the first full year that the Act was implemented throughout the country, the Ministry of Rural Development reported that 2.84 billion work-days were created. The number was on the higher side, given that 2009-2010 was a drought year. This claim can be cross-checked because the NSS household survey asked households how many days of work they had got under the MGNREGS. The answer was 1.47 billion days. This is around 51.8 per cent of the 2.84 billion work-days claimed by the Ministry of Rural Development.[848]

What does this mean? This basically means that a little more than 48 per cent of the days were ghost days. Hence, while the Ministry of Rural Development has all the proof needed to show that some work was done and payments were made, the people who were supposed to have done that work don't remember receiving those payments.[849]

Hence, like other Big Government programmes, the MGNREGS also sees a huge leakage. The question is: How does this leakage happen? Officials who are supposed to make payments to workers underpay them. This is basically theft from the beneficiaries. There are other ways as well. Officials often over-report work. How does this happen? As Paul Niehaus and Sandip Sukhtankar write in a research paper titled 'Corruption Dynamics: The Golden Goose Effect': "For example, a worker who worked for 10 days on a daily wage project when the

statutory minimum wage was Rs. 55 per day might receive only Rs. 45 per day in take-home pay. The official might report that the worker had worked for 20 days rather than 10. His total rents would then equal $55 \times 20 - 45 \times 10 = 650$ rupees, the sum of the two sorts of theft."[850]

In both the cases, the officials in charge of running the scheme (the programme officer, the GRSs, etc.) siphon off the money. Over-reporting is the most prevalent form of leakage, given that it deals with siphoning off money from a distant taxpayer. There are basically two forms of over-reporting of the work carried out under the MGNREGS. One is reporting in the names of 'ghost' workers, who do not exist but against whose names work is reported and, over and above that, against whom payments are made. At the same time, there are 'quasi-ghost' workers as well. These are people who exist and who haven't been given any work but against whose names work is reported and payments made as well.[851]

When it comes to over-reporting work, the genuine workers have no interest in reporting the fraud. As Niehaus and Sukhtankar point out:[852]

> A key difference between theft from beneficiaries and theft from taxpayers lies in the way they are monitored. Underpaid workers who know they are underpaid could either complain to someone at the block or district headquarters or simply leave for the private sector. On the other hand, workers have less incentive to monitor over-reporting because the programme's budget is not fixed: a rupee stolen through over-reporting does not mean a rupee less for the workers.

The interesting bit is that, as per the MGNREGA, the labour budget needs to be at least 60 per cent of the total expenditure. In practice, it is substantially higher.[853]

The question is: How do officials manage to carry out such a fraud? In the case when payments are made in cash to workers, it is very straightforward. The worker is simply paid a lesser amount. He can obviously complain against this. But anyone who has seen how any Indian system works would take what he gets and consider the rest as the cost of the payment that was made.

As Niehaus and Sukhtankar write in another research paper, titled 'The Marginal Rate of Corruption in Public Programs: Evidence from India':[854]

> The first point of appeal is the Program Officer, a block-level role typically played by the Block Development Officer (BDO); further appeals go to the district Programme Coordinator, a role played by the District Collector. Both the

BDO and the Collector are appointed bureaucrats from the state or national administrative service. By rule, these officials should accept grievances on standardised forms and issue receipts so that the petitioners can follow up. How effectively this system functions in practice is an open question.

But things are not so straightforward when payments are supposed to be made into post office accounts, or even bank accounts for that matter. How do things operate in such a situation?

There is an excellent example in the context of Jharkhand. The siphoning off of money happens when the middlemen, the officials who run the MGNREGS, the elected functionaries (i.e., the members of the Gram Panchayats), local officials and the postmasters (if the payment of wages is through the post offices) all come together.[855]

It will soon become clear why the postmaster is a very important part of the process and why, without him being a part of the process, the scam cannot be carried out. In July 2014, a case of corruption was brought to light in the Murhu block of the Khunti district in the state of Jharkhand. The muster rolls were fudged, and fake names to which the carrying out of work had been assigned had been added to them. Post office accounts were opened against these fake names and money was credited into them. This amount was then withdrawn by the middlemen in connivance with the postmaster.[856]

Hence, if the postmaster hadn't been a part of the fraud, the money being deposited into the fake accounts couldn't have been withdrawn. In Jharkhand, 70 per cent of the MGNREGS workers' accounts are still in post offices, which have fairly weak norms of accountability at the lower levels.[857]

This scam was brought to light by Ankita Aggarwal in a research paper titled 'The MGNREGA Crisis—Insights from Jharkhand'. As she writes: "The gram rozgar sevak [i.e., sahayak] participated in the scam by signing the fudged muster rolls and the junior engineer manufactured an inflated measurement book. Block-level officials and elected representatives may also be responsible, as the work was implemented by the panchayat samiti."[858]

We have seen a few examples of how the funds allocated under the MGNREGA get siphoned off in a few places. In fact, there are many other examples of MGNREGA funds being siphoned off in different parts of the country. There are also many examples of the MGNREGA not being implemented the way it is theoretically supposed to be.

Here are a few examples:

a) In 2015, in the Palamu district of Jharkhand, another example of corruption was uncovered. In this case, the work was carried out by machines. This is something, as stated earlier, which is not allowed under the MGNREGS. The work has to be carried out by the labourers alone, and machines are neither allowed to be bought or hired using funds allocated to the scheme. A large-scale demand for work was made using quasi-ghost workers. The interesting thing was that wages had to be paid after fingerprint authentication of the workers. Hence, the workers were made a part of the scam as well. All they needed to do was to come to the branch, verify their identity, collect the money, take their token cut, and hand over the bulk of the money to those carrying out the scam.[859]

The point is that even technology (fingerprint authentication in this case) is no guarantee against those determined to carry out a scam.

As mentioned earlier, the labour budget has to be at least 60 per cent of the total expenditure. The remaining money can be spent on procuring material to build. This material needs to be procured only from registered suppliers. But in Jharkhand, it is usually procured from unregistered suppliers. The unregistered suppliers pay a commission to registered suppliers to get a bill from them, which is then submitted to the administration for reimbursement. Furthermore, since the unregistered suppliers also need to make money in the process, the total amount of material supplied is lower than that for which the bill has been made. This leads to the work remaining incomplete or being poorly attended to.[860]

b) As mentioned earlier, the MGNREGA mandates that any decision regarding the choice of works to be undertaken needs to be made in open assemblies of the Gram Sabha. But that doesn't seem to be happening. In an example from Mokhada, in the Palghar district of Maharashtra, the shelf of projects is not generated through a participatory process involving people (as is mandated).

This results in the work that is being provided not being looked upon as an asset but just as a way of earning a wage.

This makes it difficult to mobilise labour for these activities, given that they are not viewed from a developmental perspective. Furthermore, whenever there was an exaggerated measurement in the records that were kept, in comparison to the actual physical structure on the worksite, it was found that the records were fudged. The corresponding muster rolls showed fake names or names of workers who had either died or migrated and not worked on the structure at all.[861]

The workers had said that the measurements of the work done had been taken after the work was completed, with nothing being done while the work was in progress. The records, on the other hand, showed progressive measurements. The audit that was carried out could not identify 70 per cent of the structures that were built as per the records because of the absence of display boards.[862]

In fact, Mokhada is also a great example of the narrow lower end of the funnel when it comes to the implementation of Big Government schemes. In 2012-2013, eight engineers, working with two technical assistants, were supposed to handle 560 works spread across 28 Gram Panchayats in the Mokhada block. In the Jawhar block, also in the Palghar district, the situation was far worse. Eight engineers, along with two technical assistants, were expected to handle 1,039 works spread across 50 Gram Panchayats. In the Vikramgadh block in the Thane district, four engineers, along with two technical assistants, were supposed to manage 860 works spread across 43 Gram Panchayats.[863]

The engineers in the Jawhar block dedicated 60 per cent of their working hours to NREGA activities. As NC Narayanan and Nitin Lokhande write in a research paper titled 'Designed to Falter—MGNREGA Implementation in Maharashtra' regarding the Jawhar block:[864]

> The available technical capacity at the block and GP [i.e., Gram Panchayat] levels is grossly inadequate to design, monitor and evaluate the available works…. At the block level, the engineers and technical assistants were so preoccupied with the measurement of the completed works and the preparation of wage payment orders that they did not have the time to design, supervise and provide technical guidance for ongoing work.

Furthermore, the technical assistants were generally

graduates in agriculture and had no prior experience in technical aspects like earth moving or construction, which are important parts of the MGNREGS. Also, while carrying out the job demand analysis, the key stakeholders (i.e., the gram sarpanches, the gram sabhas as well as the gram rozgar sahayaks) were supposed to use the previous year's data using the Management Information System (MIS). None of the stakeholders used the MIS or even knew about it for that matter. They carried out the job demand analysis simply on the basis of the job applications that they had received.[865]

As Narayanan and Lokhande point out:[866]

> The sequence of activities that is expected to be carried out – initial surveys, designs and uploading of photographs before and after the completion of works – was not properly done due to a paucity of staff. It was clear from the interaction with the engineers that not all worksites were visited for initial surveys. Previous design and estimation sheets were used as references, making appropriate changes in dimensions and costs. With such a procedure, *it is not a durable asset that is designed, but a structure to meet the objective of job creation* [emphasis added].

c) The other big problem with the MGNREGS is at a very fundamental level. TH Chowdhary, the founding Chairman of Videsh Sanchar Nigam Ltd. (VSNL), made a very interesting point in a December 2011 column. As he wrote: "Villages cannot sustain so many unskilled labourers.... By creating useless 'work', we are promoting dependency among the unfortunate rural… and unskilled population."[867]

Chowdhary gave the example of the village of Angaluru in the Krishna district of Andhra Pradesh. Out of the 1,000 families in the village, 800 had registered themselves as below the poverty line and sought work under the MGNREGS. As mentioned earlier, the MGNREGA guarantees 100 days of work per year. If all the families are to get work, this would mean creating 80,000 man-days of work in the village, year after year, which is simply not possible. Chowdhary suggests that this leads to people getting paid for little or no work.[868]

d) The wage bill for the MGNREGS is paid by the central government. Nevertheless, the wage rates are set by the respective state governments. This gives the state-level politicians the flexibility to keep raising the wages, which is

what most of them do. [869] On May 1, 2007, the daily wage rate in the state of Odisha (then Orissa) was raised from Rs. 55 per day to Rs. 70 per day.

A survey was carried out among 1,938 households which participated in the MGNREGS between March and June 2007. This was done so as to determine whether the increase in the daily wages was actually passed on to the individuals working on the MGNREGS worksites. The result was very interesting. As Niehaus and Sukhtankar point out: "What is striking is that *none* [emphasis original] of the wage increase was passed through to [the] workers. Thus, while [the] average leakage from wage payments prior to the policy change was close to 0 per cent, [the] marginal leakage was 100 per cent."[870]

And it wasn't as if the workers were not aware of the increase in wage rates. 72 per cent of the respondents were aware of the fact that the wages had been increased. 81 per cent of these were even aware of the new wages of Rs. 70 per day. Nevertheless, this did not mean that these individuals earned higher wages starting from May 1, 2007.[871]

In fact, responses to the survey indicated that many people would do nothing major about this leakage or lack of payment to them. 22 per cent of the respondents said that they would do nothing if they faced problems. Multiple reasons were offered by those who said they wouldn't complain: (i) Complaining won't be of any help (37 per cent); (ii) It would be too time consuming or take too much effort (53 per cent): An average village in the sample was 17 kilometres from the block development office and 38 kilometres from the district office. The estimated average roundtrip time was three hours and five hours, respectively; (iii) Around one-tenth of those who had said that they wouldn't complain feared retribution.[872]

75 per cent said that they would take up the issue with the local panchayat officials or the village elders. The local panchayat officials are the ones responsible for implementing the MGNREGS. Only 7.4 per cent of the responses indicated that they would file a complaint with the block development officer, who acts as the programme officer of the MGNREGS

at the block level. Only 0.1 per cent said that they would write a letter to an MLA or an MP. (The percentages add up to more than 100% because multiple responses were allowed for.)[873]

While people don't complain, it is worth pointing out that, even if they did, Article 311(2) of the Indian Constitution says that no civil servant can be dismissed without an enquiry. This makes it difficult to fire someone outright.[874]

The interesting question is: When people don't bother to complain, why bother paying them at all? Indeed, before the increase in payment in Orissa from Rs. 55 per day to Rs. 70 per day, the average leakage of payments was very low.

For the elected officials, such as the sarpanch, it might make sense to make the payments, given that elections need to be fought in the years to come. Also, as Niehaus and Sukhtankar point out:[875]

> Hiring a worker to do some work makes it less risky to over-report a good deal more. For example, it may seem safer to claim that it took 150 person-days to dig a hole in the ground when there actually is a hole in the ground that took 50 person-days to dig than when there is no hole at all. More generally, paying a worker to do some work may increase the amount one can safely over-report by more than enough to make it profitable.

In fact, the data also suggested that the officials in charge of running the MGNREGS reported more fictitious work on wage projects when the daily wage rate was increased. The cost to the government per dollar received by the beneficiaries went up from $4.08 to $5.03.[xx]

In fact, the total amount of illicit wealth being generated by those in charge of implementing the MGNREGS is huge. As Niehaus and Sukhtankar point out: "The contrasts are stark. The estimated rate of rent extraction per panchayat is roughly 150 times the rate at which the sarpanch[e]s are compensated, and the rate per block is 1,100 times the rate at which Block Development Officers are compensated."[876]

e) Research on the MGNREGS has shown that "workers paid through banks receive significantly higher wages". [877] While those having bank accounts get paid higher wages, there are

other issues at play. The penetration of banks in rural India is very low. Hence, the last mile of getting money into the hands of the householders is a problem.[878] This leads to such problems as the MGNREGS workers having to travel long distances to collect their payments.

As Aggarwal writes in the context of Jharkhand:[879]

> Delays in processing wage payments and [the] risks of siphoning off are lower in the banking system. But banks have their own problems. Despite the central government's much touted Pradhan Mantri Jan Dhan Yojana for financial inclusion, opening bank accounts in rural Jharkhand is still a harrowing experience for MGNREGS workers. Due to the limited number of bank branches in rural areas, workers often have to make long trips at their own expense to access the banks. The bank branches are usually crowded and suffer from shortages of bank staff, and the MGNREGS workers often have to wait for a long time to withdraw their wages. Work comes to a virtual standstill in the absence of electricity or [the] internet at the bank branches, forcing workers to make another trip to open their account or withdraw their wages.

Often, banks simply refuse to open accounts for workers. In the Satgawan block in the Kodarma district in Jharkhand, there was the case of the Bank of India refusing to open accounts for 600 workers. In March 2015, these workers complained to the deputy commissioner about being unable to work under the MGNREGS because they did not have a bank account. It was only after the district official intervened that the bank got around to opening accounts for these workers.[880]

f) One reason that the poor do not have access to public services is primarily believed to be the fact that they do not have information about their rights. This is believed to be the decisive factor behind why the poor do not demand what is due to them.[881]

A study was carried out in Bihar, one of the poorest states in the country, targeting 150 villages and more than 5,000 respondents. The idea was to check how well the people knew what they were entitled to under the MGNREGS. Their knowledge regarding the MGNREGS is important, because although around 56 per cent of the population in Bihar lives below the poverty line, yet only 10 per cent participated in the MGNREGS.[882]

The results were very interesting and showed that there was a huge information gap, with many people not knowing their rights under the MGNREGA. 73 per cent of women and 95 per cent of men had heard of the MGNREGS (or actually the state-level equivalent of it, the Bihar Rural Employment Guarantee Scheme). Nevertheless, only 11 per cent of women and 37 per cent of men knew that they were entitled to 100 days of work under the MGNREGS. Half of the men and women knew that they could demand work. When it came to those below the poverty line, 38 per cent of women and 53 per cent of men knew that they could demand work.[883]

Only 2 per cent of women and 7 per cent of men knew that the work once demanded had to be provided within 15 days. Only 11 per cent of women and 29 per cent of men knew that if work was not provided after it had been demanded, an unemployment allowance had to be paid. 21 per cent of women and 44 per cent of men knew about the wage rate. Only 11 per cent of women and 24 per cent of men knew that contractors are not allowed under the scheme.[884]

In fact, the knowledge levels regarding the MGNREGS were equally abysmal on other important questions that were asked. The surprising finding of the survey was that there was very little awareness that the right to work under the MGNREGS is a universal right for rural households and is not limited to specific groups.[885]

Based on this realisation, the researchers carrying out the survey decided to plan an information campaign that would stress on the fact that "potential workers needed to demand work in order to get it". With this basic idea in mind, a 25-minute movie with an entertaining and emotionally engaging storyline was made with professional Bihari actors acting in the film.

The basic storyline of the movie was fairly straightforward. It showed a temporary migrant worker returning to the village from the city to be in the company of his wife and daughter. He learns that work under the MGNREGS is available in his village, even though it is a lean season. This means that he can stay with his friends and

family and work in the village and make some money, and hence, does not have to return to the city to earn money. The idea was that the audience would relate to the characters and, in the process, important information would be conveyed as well.[886]

Between mid-February 2010 and mid-March 2010, the film was screened in 40 out of the 150 villages where the survey had earlier been carried out. The original survey had been carried out between May and July 2009. The film was shown twice in each village. 89 per cent of those watching the movie reported that the information in the movie was somewhat new to them.

The movie increased the knowledge of the programme among the people who saw it, at least in comparison to what they knew about it earlier. There was a 53 per cent increase in the number of people knowing about the number of days they were allowed to work under the MGNREGS. There was a 36 per cent increase in the number of people who now knew about the wage rate. There was a one-third increase in the number of those knowing about the unemployment insurance and a 70 per cent increase in the number of those knowing that work had to be given within two weeks of it being asked for.[887]

As they say, the proof of the pudding is in the eating of it. So did the movie lead to better participation rates? Did it lead to more work and more money for people? The movie led to 5.1 more days of employment for the illiterate in comparison to those who were better educated. This meant a gain of around Rs. 487 in wages per person, at the rate of Rs. 95 per day. This gain was very small in comparison to the excess demand for work under this scheme. The researchers had also asked the people, during the course of the survey, how many days of extra work they would have liked under the MGNREGS. The average answer turned out to be 44 days.[888]

What this basically means is that even knowing about your rights isn't enough to get them. As Martin Ravallion, Dominique van de Walle, Puja Dutta and Rinku Murgai, the researchers who studied Bihar, write in a research paper

titled 'Try Telling People Their Rights? On Making India's Largest Antipoverty Program in India's Poorest State':[889]

> Learning one's rights in this setting is clearly not the same thing as being empowered to demand those rights…. What one considers one's 'rights' in an Indian village (say) may depend more on what local officials and elites say than rather abstract central dictates in official legislation, far removed from the realities of daily life. Possibly, people do not know their rights because there is no point [in] knowing them when the reality of their lives does not admit those rights in practice. An information campaign will not then be sufficient for people to be willing and able to take action to get what they are due.

g) All this is not to say that the MGNREGS has been a total failure and created nothing of use till date. In a study carried out across twenty districts in Maharashtra, 4,266 completed works were assigned for verification. It was found that 87 per cent of these were bonafide projects. An overwhelming number of these works supported farming activities. These included land levelling and digging wells, ponds, irrigation channels, trenches, etc. Around 90 per cent of the households in these districts which were surveyed felt that the assets that were built under the MGNREGS were very useful or, at least, somewhat useful.[890]

> This study comes with the disclaimer that it "captures the perceptions of users on quality—their own ideas of what they consider… [as] unacceptable or [of] poor quality." It doesn't make judgements of quality in the technical sense on the basis of design specification, quality of materials used, and so on.[891]

> Another interesting study was carried out in Jharkhand. In 2010, the Jharkhand government ordered the construction of 50 irrigation wells in each panchayat in the state under the MGN-REGA. By November 2013, nearly 1.15 lakh wells had been sanctioned. Government estimates suggest that 80 per cent of these wells have been completed. A study was carried out to check these claims, and physical visits were made to 926 wells built under the MGNREGS. It was found that nearly 60 per cent of the wells sanctioned under the scheme had been built. In fact, the number rises to 70 per cent if the wells completed till the ground level (i.e., without the parapet) are also included. The study further found that 96 per cent of the completed wells were being utilised and

that 95 per cent were being utilised for irrigation.[892]

The researchers found that the annual average rate of return on the expenditure incurred on a completed well was 6.5 per cent per year. This means that the expenses incurred by the government as well as the well owners in constructing the well could be recovered in a period of 15.4 years, on an average.[893]

It was further found that the government rarely covered the entire expense for constructing the well on private land. In fact, 87 per cent of those with completed wells had to spend money out of their own pockets for constructing the well. Interestingly, 36 per cent of those whose wells had been completed had to take a loan to complete it. Another 9 per cent had to mortgage a movable or immovable asset to fund their wells. Despite this, 96 per cent of the owners with completed wells were happy at having constructed the well. 92 per cent were satisfied with the quality of the well, and 85 per cent felt that their incomes had risen because of the well.[894]

What we have seen until now are examples of the MGNREGS both working and not working in different states and with regard to different contexts. How do things look on an all-India basis? In order to get a feel of that, we will have to look into the report issued by the Comptroller and Auditor General (CAG) of India in 2013.

****

The CAG carried out the first performance audit of the MGNREGS between February 2006 and March 2007. The second audit was carried out between April 2007 and March 2012. The implementation of the scheme was checked in 3,848 gram panchayats across 28 states and 4 union territories. The results were clearly not very encouraging. Some of the most important findings are discussed here. (Wherever possible, I will try and provide updated data alongside the CAG findings.)

The MGNREGA guarantees 100 days of work per household. But the MGNREGS has never managed to achieve that. The CAG found that the per rural household employment under the scheme had stood at 54 days in 2009-2010.[895]

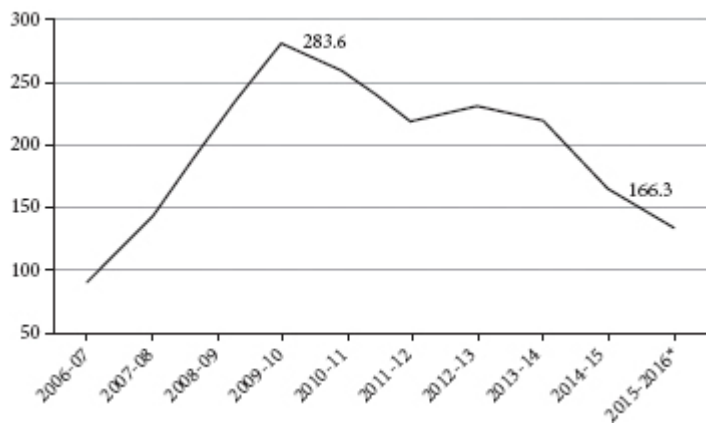
This further declined to around 46.7 days in 2012-2013 and then fell to 41.3 days in 2013-2014. The number of working days per household had come down further to 40 days in 2014-2015 and again rose to 49 days in 2015-2016.[896]

Interestingly, in 2013-2014, only 6.4 per cent of the households completed 100 days of work, as mandated under the MGNREGA. The figure had been at 10.5 per cent in 2012-2013.[897] In 2015-2016, it was at 10.1 per cent.[898] This trend is also clearly visible in the total number of person-days of work generated by the MGNREGS (see Figure 13.1).

As can be seen from Figure 13.1, the work generated under the MGNREGS peaked in 2009-2010 and has been falling since then. In 2009-2010, 283.6 crore person-days of work were generated. By 2014-2015, this had fallen, by 41.3 per cent, to 166.3 crore person-days.

The question is: Why is this happening? The answer can be found in the allocations made to the MGNREGS by the central government over the years. Take a look at Figures 13.2(a) and 13.2(b). They show the total money spent on the MGNREGS and the total wage expenditure on it, respectively.

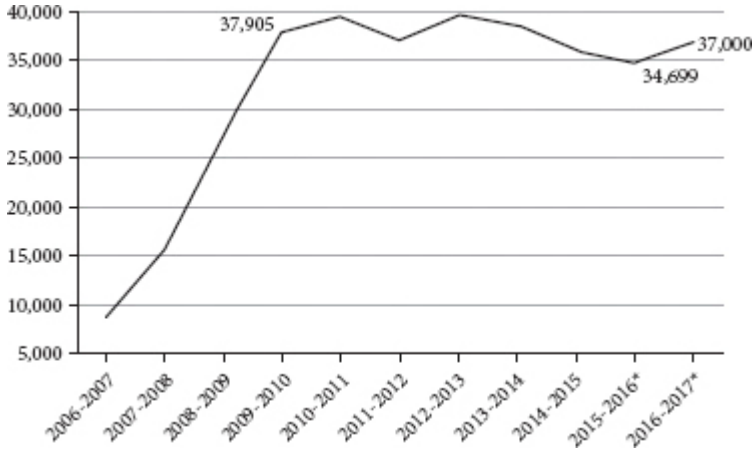
Figure 13.1: Total number of person-days worked under the MGNREGS (in crore) till 2014-2015.



* Up to December 31, 2015.

Source: The Mahatma Gandhi National Rural Employment Guarantee Act, 2005—The Journey of a Decade, Ministry of Rural Development.

Figure 13.2(a): Total government expenditure on the MGNREGS (in Rs. crore) over the years.



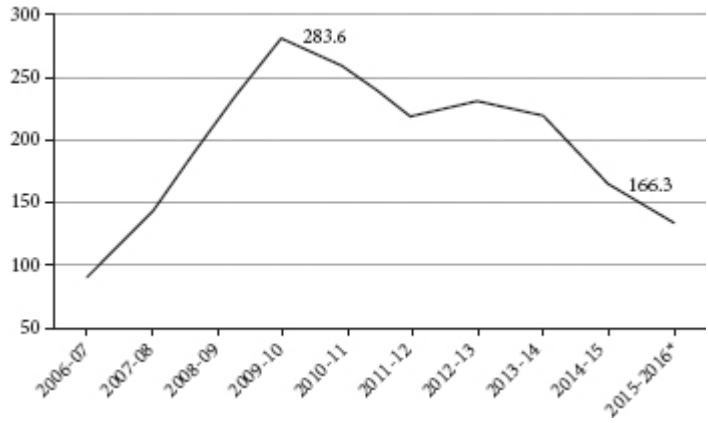
* Budgeted central outlay.

Source: The Mahatma Gandhi National Rural Employment Guarantee Act, 2005— The Journey of a Decade, Ministry of Rural Development; and www.indiabudget.nic.in.

The total expenditure on the MGNREGS was higher in 2009-2010 than the allocations have been in 2015-2016 and 2016-2017 (See Figure 13.2(a)). Once inflation is factored in, we see that the spending on the MGNREGS in real terms has come down dramatically. In 2009-2010, Rs. 37,905 crore was spent on the MGNREGS. It was in this year that the number of days of work per household peaked at 54 days.

So how much would the government have had to spend in 2015-2016 in inflation-adjusted terms for the amount to be the equivalent of Rs. 37,905 crore? The amount works out to Rs. 61,676 crore.[xxi] And what was the allocation towards the MGNREGS in 2015-2016? Rs. 34,699 crore. And how much money was finally spent during the course of the year? Rs. 36,645 crore.[899]

Figure 13.2(b): Wage expenditure on the MGNREGS (in Rs. crore) till 2014-2015.



* Up to December 31, 2015.

Source: The Mahatma Gandhi National Rural Employment Guarantee Act, 2005— The Journey of a Decade, Ministry of Rural Development.

What about 2014-2015? Around Rs. 59,060 crore would have had to be spent in inflation-adjusted terms. However, the total expenditure on the MGNREGS in 2014-2015 was at Rs. 36,032 crore, which was significantly lower.

This explains, to a large extent, why the average number of days of work available to workers under the MGNREGS has fallen over the years. The money allocated towards the scheme/Act has been more or less constant, whereas the average wages have been going up. The average wages of a labourer working under the MGNREGS in 2006-2007 had stood at Rs. 65 per day. [900] The average wages per day in 2015-2016 were at Rs. 154.[901]

Nevertheless, in 2016-2017, the wages have jumped to more than Rs. 200 per day in several states. In 2016-2017, the highest per day wages under the MGNREGS is in the state of Haryana, at Rs. 259 per day (against Rs. 251 per day in 2015-2016). In the states of Kerala, Karnataka, Tamil Nadu and Punjab, it is at, respectively, Rs. 240 per day (Rs. 229 per day in 2015-2016), Rs. 240 per day (Rs. 220 per day in 2015-2016), Rs. 203 per day (Rs. 183 per day in 2015-2016), and Rs. 218 per day (Rs. 200 per day in 2015-2016). In the eastern states, the wages are lower than Rs. 200 per day.[902]

The point is that, if the per day wages go up (as they should) and the expenditure on the MGNREGS does not correspondingly go up, it

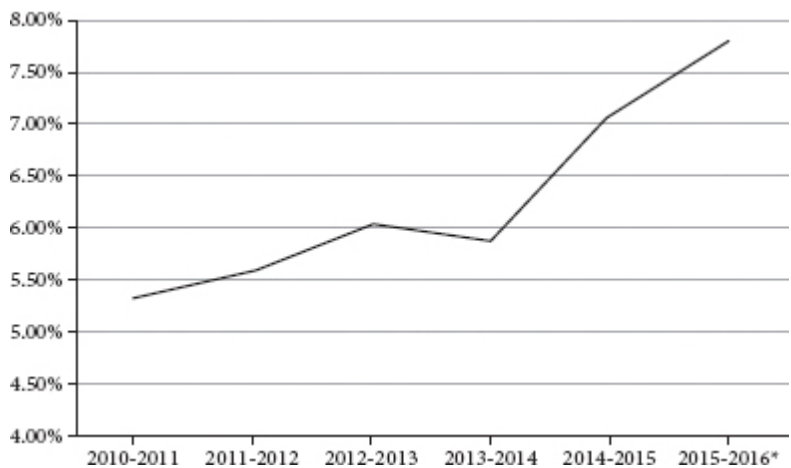
is but natural that the number of days of work available under the MGNREGS would come down.

As Aggarwal writes in the context of Jharkhand:[903]

> Due to the budget caps and delays in receiving funds from the ministry in 2014-2015, Jharkhand was left with very little money from October 2014 to the [end] of the financial year to provide employment and ensure [the] timely payment of wages. Given the uncertainty [in] receiving additional funds [for] the rest of the financial year, local officials became reluctant to open works; they preferred violating [the] workers' right to work than dealing with the hassles of delays in wage payments. Further, the ministry exempted the states from paying compensation to workers who did not receive their wages on time due to [the] shortage of funds.

The allocation of money towards the MGNREGS went up for the first few years and since then has almost come to a standstill. It seems as if the central government has lost interest in the scheme. When the current Finance Minister, Arun Jaitley, made an allocation of Rs. 37,000 crore towards the MGNREGS in 2016-2017, a section of the media went to town saying that this had been the highest allocation towards the scheme ever. This isn't true, since higher allocations had been made in the past. Also, as discussed earlier, if we were to adjust the figures for inflation, then the current allocations towards the MGNREGS are significantly lower than in comparison to the past.

Figure 13.3: Food subsidies as a percentage of the total government expenditure between 2010-2011 and 2015-2016.



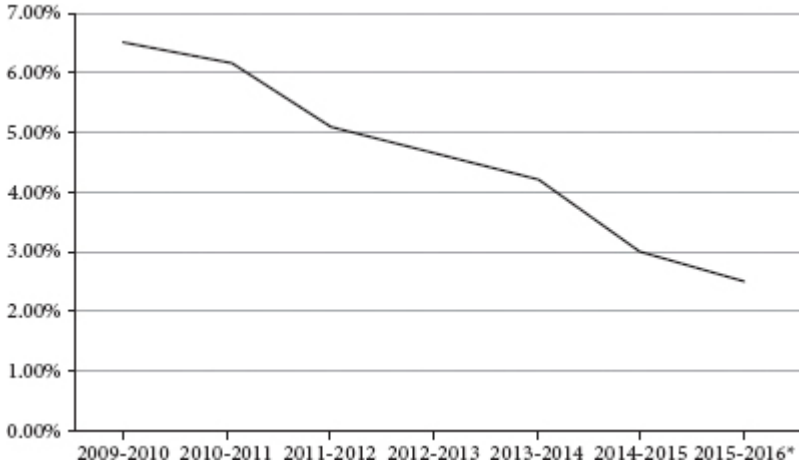
Source: Centre for Monitoring Indian Economy. * Revised estimates.

So what led to the allocation towards the MGNREGS remaining flat over the years? The government has offered no explanation for this. It is easy, however, to figure out why this has been the case. Every year,

there is only a given amount of money that the government can spend. If it is spending more money on a few things, then it has to cut down on expenditure somewhere else. And the MGNREGS just happens to be that somewhere else.

Take a look at Figure 13.3. It shows the food subsidies as a percentage of the total government expenditure during the course of the year for the past few years.

Figure 13.4: MGNREGS expenditure as a percentage of the total government expenditure between 2009-2010 and 2015-2016.



* Budgeted central outlay.

Source: Centre for Monitoring Indian Economy; *The Mahatma Gandhi National Rural Employment Guarantee Act, 2005—The Journey of a Decade, Ministry of Rural Development; and www.indiabudget.nic.in.*

As is clear from the graph, the food subsidies as a percentage of the total government expenditure have risen over the years. And this has meant that the government has had to cut expenditure towards other allocations, like the MGNREGS.

Figure 13.4 shows the expenditure on the MGNREGS as a percentage of the total government expenditure over the years.

The ratio has fallen over the years. In 2009-2010, the ratio was at 6.49 per cent. It has since fallen to 2.49 per cent. Other than food subsidies, other Big Government expenditure areas, like mounting losses of the public sector enterprises, the recapitalisation of the public sector banks, the abundance of black money, etc., have also had a role to play in the amount of money being spent towards the MGNREGS coming down over the years.

****

What were the other major findings of the CAG audit? The audit found that close to 7.7 lakh works, amounting to Rs. 4,071 crore, were incomplete even after one to five years. It also found that, in fourteen states and one union territory, 1.29 crore works, amounting to close to Rs. 1,27,000 crore, were approved during the annual plans. Nevertheless, of these, only 38.65 lakh works, or around 30 per cent of the planned works, amounting to Rs. 27,792 crore, had been completed during the period of the audit. This showed significant inefficiency in the implementation of the annual plans.

This seems to be the general trend. Data from the Ministry of Rural Development suggests that around 71 per cent of the work that had been initiated under the MGNREGS since the scheme started has been completed. In actual fact, in 2015-2016, the work completion rate under the MGNREGS was only 23 per cent.[904]

The CAG audit also found that the expenditure on works amounting to a total of Rs. 6,547 crore did not lead to the creation of any durable assets. In a large number of cases, money was diverted for uses which are not allowed under the MGNREGS.

Furthermore, the audit found that job cards had not been issued to 12,455 households in six states. But, more worryingly, photographs were not pasted onto 4.33 lakh job cards in seven states. If there are no photos on the job cards, how can it be ensured that only those entitled to work under the MGNREGS are actually doing the work?

Also, in the gram panchayats which were audited, irregularities regarding the registration of workers were found. At the same time, it was noticed that there were delays as well as the non-issuing of job cards. Furthermore, obtaining a job card did not automatically translate into employment. The CAG report points out that “in over 47,687 cases, the beneficiaries were neither provided employment nor received an unemployment allowance”.

This basically meant (as we have seen earlier) that work was not available on demand as it should have been. What was even more worrying was the fact that the poorest states did not get the highest allocations under the MGNREGS. The three states of Bihar, Maharashtra and Uttar Pradesh accounted for 46 per cent of the rural poor in India during the period of the audit, yet they accounted for only 20 per cent of the funds released under the MGNREGS. Thus, as

the CAG report puts it rather disturbingly, the poorest of the poor were not able to exercise their rights under the MGNREGS.

In four states, namely, Arunachal Pradesh, Kerala, Tamil Nadu and Manipur, the governments hadn't appointed GRSs. Over and above this, there were widespread shortages of GRSs spread across different states. These shortages ranged from 20 per cent to 93 per cent. Indeed, this is worrying, because the MGNREGS is ultimately implemented by the GRSs on a day-to-day basis.

As mentioned earlier, the MGNREGA envisages vigilance at various levels, starting at the village level with social audits. Over and above this, there are district- as well as state-level vigilance committees. As the CAG report pointed out:

> Gaps in the envisaged monitoring mechanism were noticed in a large number of states. There were significant shortages in [the] verification of works by state officials. Quality Monitors and Vigilance and Monitoring Committees had not been appointed in several states. Social audit[ing] remained ineffective to a large extent, as social audits had not been established. Shortfalls in social audit[s] were noted in a number of states.

This again is an excellent example of Big Government acting as a funnel, a funnel which is very broad at the top. When a policy is designed at the central government level, a perfect policy with all the requisite check-ins and monitoring systems built in is created. But, at the implementation level, the funnel is very, very narrow. The same set of local government employees needs to implement many government programmes. And this is where things start to go wrong.

And if all this wasn't enough, in 23 states there were widespread instances of the non-payment of wages as well as the delayed payment of wages. The CAG could not measure the scale of these inadequacies because of the extensive irregularities in record maintenance at all levels. This finding is in line with other Big Government schemes where leakages are high and the money or a cheaper good never reaches those it is intended for.

What can be done (or, more importantly, is being done) in order to ensure that money reaches those who have worked under the MGNREGS on time and without hassles? As Karthik Muralidharan, Paul Niehaus and Sandip Sukhtankar write in the research paper titled 'Building State Capacity: Evidence from Biometric Smart-cards in India':[905]

> Building a secure payments infrastructure, … [which] makes it easier for

governments to accurately identify beneficiaries and transfer benefits directly into their bank accounts, may significantly improve state capacity for programme implementation. This view has gained momentum from recent technological advances, which have made it feasible to issue payments via bank accounts linked to biometrically authenticated unique IDs. Biometric technology is seen as especially promising in developing countries, where high illiteracy rates make it unrealistic to universally deploy traditional forms of authentication, such as passwords or PIN numbers.

In fact, biometric identification has gained global popularity, and nearly 230 programmes in 80 countries deploy biometric identification payment systems. A good example in the Indian case is the smart-card programme that was implemented in 157 sub-districts in the undivided state of Andhra Pradesh to make payments to those working under the MGNREGS. By May 2012, the payments made through smart-cards had reached around 50 per cent. This is a very good ratio when one takes into account the fact that it took the United States of America over a decade and a half to move all social security payments to electronic transfers. In the Philippines, it took five years for a cash-transfer programme to reach 40 per cent of those it was intended for.[906]

The results of the smart-card biometric identification programme to make MGNREGS payments in Andhra Pradesh were thus fairly encouraging. After payments were made through this route, the workers spent 22 fewer minutes in collecting the money that was due to them. Furthermore, they collected their money 5.8 to 10 days sooner after finishing the work. The earnings through the MGNREGS increased by 24 per cent without the government having to increase its allocation towards the scheme. There was also a 7.1 per cent increase in the number of households which reported having worked under the MGNREGS. This happened primarily because there was a significant reduction in the number of quasi-ghost workers.[907]

As we have seen earlier, the officials in charge of running the MGNREGS on a day-to-day basis tended to over-report the total work done against a beneficiary's name. This beneficiary had neither worked at the worksite nor received the payment made against his/her name. With the introduction of a biometric system of payment, it became more difficult for officials to fudge the actual work done. This essentially led to more actual work being done against the claimed wages, and, in the process, there was an increase in the payments made to the workers.[908]

In fact, the savings from the scheme were many times the money

that was spent in getting the infrastructure in place. It cost the government $4 million to implement and operate the programme. In comparison, the value of the time savings of the workers was $4.5 million. At the same time, the leakage reduction in the MGNREGS worked out to $38 million per year, which is more than nine times the cost of implementation of the programme. Leakage in this case essentially means the officials creating work on paper and claiming payments against it from the government. One factor that needs to be kept in mind while discussing leakages is the fact that the number of job cards typically tends to be more than the number of households. This means that individual households typically tend to have more than one job card. When it comes to the sub-districts where the smart-card programme was launched, the ratio of job cards to households was 1.9:1. This basically means that the leakage is typically underestimated.[909]

Of course, all this went down well with the people who worked under the MGNREGS. 90 per cent of the beneficiaries reported that the smart-card-based payment system was better than the earlier system. It is interesting to know how these payments were made. The government of Andhra Pradesh entered into contracts with banks. The banks, in turn, hired technology service providers to manage the technology required for the last-mile delivery and authentication. The banks were paid a commission of 2 per cent on the total amount of money that they paid out. The bank was supposed to pay the technology service provider out of this commission, depending on the contract it had entered into. In some cases, the technology service provider outsourced the last-mile delivery to a bank correspondent who, in turn, worked through customer service providers who made the actual payments to those working under the MGNREGS.[910]

The point is that the conventional system of the government officials, whose job it was to ensure that the payments were made, was totally done away with, and an entirely new system was created to implement the smart-card system. While this was one reason behind the success of the scheme, it also in its own way ensured that only 50 per cent of the payments were made through smart-cards and not 100 per cent, even though there was political will to do the same.[911]

As Muralidharan, Niehaus and Sukhtankar point out: “The poor gained significantly from the reform: beneficiaries received payments faster and more reliably, spent less time collecting payments, received a higher proportion of benefits, and paid less in bribes.” Nevertheless,

despite this success, the government almost killed the programme.

The question is: Why? As Muralidharan, Niehaus and Sukhtankar write: "Local officials (whose rents were being reduced) were much more likely to relay negative anecdotes about smart-cards than positive ones, creating doubts among political leaders about the merits of the smart-card project. This bias was so pronounced that [the] government of Andhra Pradesh nearly scrapped the project in 2013, but ultimately decided not to do so, in part because of our results and data on the beneficiary preference for smart-cards."

In fact, we had seen something similar in the cash-transfer programmes which replaced the public distribution system for the right to food security in Chandigarh and Puducherry. Hence, the rentiers whose rents are reduced because a better system of delivery is introduced are likely to project it in a bad light. This remains the biggest obstacle to any reform that seeks to challenge the *status quo* of Big Government.

Also, the question is: How many parallel systems can be created ignoring the existing government which is in place? Furthermore, when the local governments are ignored and their rents come down, there are likely to be political implications. Will politicians and political parties be willing to face the same?

There are other challenges with using technological interventions which need to be handled with care in order to ensure that the rentiers do not win. In the state of Jharkhand, for example, banks employ banking correspondents so as to ensure that the MGNREGS beneficiaries don't have to queue up at the bank. In order to make payments to beneficiaries, the banking correspondents essentially authenticate identity through biometric smart-cards. For biometric authentication, the Internet is needed. But an Internet signal is often not available in rural areas, which are at a distance from the block headquarters.[912]

There are also cases in which the beneficiaries are not able to establish their identity because of weathered fingerprints or an improper capturing of fingerprints at the time of enrolment in the biometric system. In these cases, the beneficiaries have to go to the bank branch to get what is due to them. Banks only entertain those beneficiaries who have a written confirmation from a banking correspondent about their inability to withdraw money using

biometrics. This takes away the option of the MGNREGS beneficiaries going to the branch directly and withdrawing their own payments. This becomes important if the banking correspondent does not visit the villages often enough or is dishonest.[913]

Furthermore, there are also issues of bank account numbers or post office numbers having been entered incorrectly. If they are not entered correctly, payments fail, and the mechanism to right these issues is not so straightforward.[914]

The point is that any transfer of money electronically will have its own set of challenges. And every challenge that is faced will be used by those who benefit from the existing system to project it as the better one.

[xx] This is one of the ironic tragedies of the best social science research carried out in India. It is either carried out by foreigners or by Indians employed in foreign universities or institutions. Hence, the figure is in dollars.

[xxi] Using the Consumer Price Index for agricultural labourers.

14.CONCLUSION: OF GRAY RHINOS, AND NOT BLACK SWANS

> Yes, there were times [when] I was guided by Manmohan and other economists…. There were also times [when] I had to push Manmohan and others. I had to tell them: 'I will take the political responsibility. You go ahead.'
>
> – PV NARASIMHA RAO[915]

In 2007, a book written by Nassim Nicholas Taleb took the world by storm. The book was titled *The Black Swan—The Impact of the Highly Improbable.*

The term 'black swan' was coined by the 19th century English economist John Stuart Mill. Taleb's book brought it back into the public limelight. It has often been used in the aftermath of the financial crisis which broke out in mid-September 2008, with Lehman Brothers, the fourth largest investment bank on Wall Street, going bust.

Taleb defined a black swan as follows: "Before the discovery of Australia, people in the Old World were convinced that *all* [emphasis original] swans were white, an unassailable belief as it seemed completely confirmed by empirical evidence. The sighting of the first black swan might have been an interesting surprise for a few ornithologists and others extremely concerned with the colouring of birds, but that is not where the significance of the story lies. It illustrates the severe limitation to our learning from observations or experience and the fragility of our knowledge. One single observation can invalidate a general statement derived from millennia of confirmatory sightings of white swans. All you need is one single (and, I am told, quite ugly) black bird."[916]

Taleb used this definition of a black swan to define a black swan event. Such an event has three characteristics: "First, it is an *outlier* [emphasis original], as it lies outside the realm of regular expectations, because nothing in the past can convincingly point to its possibility. Second, it carries an extreme impact. Third, in spite of its outlier status, human nature makes us concoct explanations for its occurrence *after* [emphasis original] the fact, making it explainable

and predictable."[917]

You must be wondering, dear reader, why we are suddenly talking about black swans in what is the concluding chapter of this book. The point I want to make here is that the problems facing India are *not outside the realm of regular expectations* (something which is essential to a black swan event), given that they are obvious and we can see them coming or are already facing them.

Take the case of India's 'demographic dividend' and the number of new workers it is throwing up into the workforce regularly. Given that there are not enough jobs going around for this lot, it is ultimately going to create problems. Or the fact that the learning outcomes of the students passing out of the Indian education system have fallen dramatically over the years. Hence, even if we are able to create jobs, the skills required to carry out those jobs might simply not be there.

These problems are within the realms of regular expectations. They are what Michele Wucker calls *gray rhinos*. As she writes in *The Gray Rhino*: "Like its cousin, the Elephant in the Room, a Gray Rhino is something we ought to be able to see clearly by virtue of its size. You would think that something so enormous would get the attention it deserves. To the contrary, the very obviousness of these problematic pachyderms is part of what makes us so bad at responding to them. We consistently fail to recognise the obvious, and so prevent highly probable, high-impact crises: the ones that we have the power to do something about. Heads of state, CEOs of businesses and organisations, like all of us, are often worse at handling Gray Rhinos than they are at acting swiftly when an unexpected crisis arises seemingly out of the blue."[918]

This is precisely the point that I had made in the introduction to this book about countries and leaders finding it easy to act in the event of an economic crisis, like India did in 1991.

Meanwhile, Indian leaders are busy telling the world that all is well. In fact, Finance Minister Arun Jaitley has said on a number of occasions that India has the potential of growing at 10 per cent or more.

On one such occasion, in May 2015, he said: "The country has the potential of taking the economic growth to double digits. The government will take appropriate action in this regard."[919] If there were an award for being the master of banality, Jaitley would have

won it hands down. On an earlier occasion, in April 2015, Jaitley had said in Washington: "India has the potential to make nine to ten per cent its new normal in the years to come."[920]

In the same speech, Jaitley also talked about India's demographic dividend. He said that India was on the brink of a demographic shift. This would lead to the proportion of the working-age population between 15 and 59 years increasing to 64 per cent of the population by 2021. In 2001, this figure was at 58 per cent. Also, 6.35 crore new workers will have entered the workforce between 2011 and 2016, Jaitley said.[921]

Of course, the Finance Minister was talking in general terms, like politicians do, and presented India's demographic dividend to the American audience in a positive way. He did not bother explaining where the jobs for these new workers entering the workforce would come from, or, for that matter, that many of them are unskilled or low-skilled, or the fact that their ability to read, write and do basic maths is, at best, shaky.

Since then, though, the Finance Minister has revised his opinions. In March 2016, he said: "In the current global environment, realistically speaking, it is extremely difficult to achieve double-digit growth."[922] Nevertheless, his misplaced optimism still remains intact. In June 2016, Jaitley said that India's economy was poised to grow at a much faster pace (though, to his credit, he did not say at 10 per cent or at a double-digit growth rate).[923]

He also claimed that India would add $1 trillion to the economy every few years. He did not explain how few the 'few years' were expected to be. "It's only a matter of a few years when we will jump from USD 2 to 3 to 5 trillion," Jaitley said.[924]

In fact, this confidence—or should I say overconfidence?—reminds me of a 2012 TV discussion between Ruchir Sharma, who was then the head of Global Macro at Morgan Stanley (and still is), and Montek Singh Ahluwalia, who was the then Deputy Chairman of the now defunct Planning Commission. The discussion was taking place on the NDTV channel, with Prannoy Roy anchoring it.

Sharma's first book, *Breakout Nations*, had just been published. The core point of the book was that economic growth cannot be taken for granted. In the long run, very few nations have grown at a pace of greater than 5 per cent per year on a consistent basis. In fact, only six

countries (Malaysia, Singapore, South Korea, Taiwan, Thailand and Hong Kong) had managed this pace of growth for four decades. And only two (Taiwan and South Korea) had done so for five decades.

This is the point that Sharma was trying to make in the discussion. He was trying to suggest that India should not take economic growth for granted. In fact, 2012 was when things had just started looking bad for India's economy, after many years of strong growth.

Ahluwalia, given that he was a part of the government at that time, kept insisting that India would continue to grow at a fast pace and that an economic growth of 7 per cent was a given. Things did not turn out to be like that, and pretty soon India was growing at less than 5 per cent per year, its economic growth having slowed down considerably.

Jaitley's confidence, like that of Ahluwalia's, is similarly misplaced, for the simple reason that he too is taking India's economic growth for granted. For India to grow at a rapid pace, the biggest Gray Rhino needs to be tackled. And what is that? None other than Big Government!

****

In Chapter 3, we saw that the Right to Education Act has totally messed up the education scenario in India, with the learning outcomes of children falling dramatically.

The ability to read, write and do basic maths is very important not just to live life but also to find jobs. Take the case of jobs like plumbing or being an electrician or a mason. These are jobs which are very important in the construction sector. None of these jobs can be done without basic learning outcomes being in place.

Also, as the economist Vijay Joshi puts it in *India's Long Road:* "In today's world, primary education is not enough for employability."[925] The draft New Education Policy of 2016 makes a similar point when it states: "A large proportion of the products of the education system are found to lack employable skills." This is primarily because learning outcomes are simply not in place.

At the same time, if learning outcomes are indeed in place, they make life generally easier. Sometime in August 2016, I happened to be at the passport office in Mumbai. There was a young, well-dressed

gentleman sitting next to me. He also happened to carry a smart phone and was wearing a pair of dark glasses. Nevertheless, he was requesting people to write an application for him by saying "*Main zyada padha-likha nahi hoon*" (I am not so well educated).

The point here is that one doesn't have to be a graduate to write an application. Given the hopelessness of the situation, I finally wrote the application for that youth. Having done that, I asked him till what standard he had studied, to which he proudly told me: "*Matric kiye hain*" (I have done my matriculation).

If an individual cannot write a simple, basic application in his or her own mother tongue (in this case, Hindi) after having passed the tenth standard, there isn't much value to his/her education. While this is just a one-off example, it shows how important it is to have some basic educational learning outcomes in place in order to be able to do the most basic things in life.

In fact, almost all the data cited in the third chapter, which dealt with the Indian education scenario, came from the Annual Status of Education Reports (ASER), which were regularly published by the ASER Centre, an autonomous unit of the NGO Pratham, between 2005 and 2014. The point being that almost all the data cited was not from government documents.

In late March 2016, *The National Policy on Education 2016: Report of the Committee for Evolution of the New Education Policy* was submitted to the government. The Committee was led by the former bureaucrat TSR Subramanian. The Committee's findings were similar to those of ASER.

Here are a few points that the Committee made:

a) The quality of education in terms of learning outcomes is undeniably poor, particularly in the government school system. This is a matter of serious concern, since approximately 80 per cent of all recognised schools at the elementary stage are government-run or supported.

As the Committee points out: "Available data indicates that, in 2014, nearly 20 per cent of the children in Class 2 did not recognise numbers from 1 to 9 and nearly 40 per cent of the children in Class 3 were unable to recognise numbers

till 100. More disturbingly, these proportions have grown progressively and substantially since 2010." (The Right to Education Act was implemented starting from April 1, 2010.)

b) Teacher absenteeism, estimated at over 25 per cent every day, has been identified as one of the reasons for the poor quality of students' learning outcomes. It has plagued our school system for many years. Teachers are unionised and politically influential, as a result of which there is neither political will nor administrative initiative to remedy the situation. Some states are trying to address this malaise by strict vigilance and monitoring, and the use of mobile phones and biometric attendance recording, but the situation is far from satisfactory.

c) The National Achievement Survey identifies poor learning outcomes as the biggest challenge facing Indian education. Poor quality of learning at the primary school stage naturally spills over to the secondary stage, where the gaps get wider, and continues on to the college years, leading to very poor outcomes in the higher education sector.

d)Children from historically disadvantaged and economically weaker sections of society and first-generation learners exhibit significantly lower learning outcomes and are more likely to fall behind and drop out of school.

e) While the infrastructure facilities in the school system have significantly improved, there has been little corresponding impact on the quality of instruction or learning. On the contrary, repeated studies have indicated a worrisome decline in learning outcomes in schools.

f) The perceived failure of the schools in the government system to provide education of minimal quality has triggered the entry of a large number of private or aided schools, even in the rural areas. Concurrently, there has been a mushroom growth of private colleges and universities, many of them of indifferent quality.

g) The Committee's experience is that, by and large, the teacher community consists of sincere persons with potential, where most teachers would perform with dedication, but a small proportion among them takes advantage of the lack of

supervision and uses political contact to gain proximity to power, and thereby, exercises influence on the majority of teachers. This results in standards of discipline and pride in belonging to a noble profession giving way to apathy and the negligence of core responsibilities. Ultimately, this adversely affects the quality of teaching and learning outcomes.

h) When children are assured of promotion to the next class regardless of their performance, they become non-serious, inattentive to studies and irregular in attendance. For many students, the mid-day meal is the only incentive to go to school. Teachers too soon lose interest in teaching such non-receptive and unmotivated students. Consequently, while the no-detention policy has certainly resulted in a significant increase in student enrolment, there has been little or no improvement in academic standards or the quality of education.

i) School education in India is provided mostly in small schools. Nearly 33 per cent of all schools taken together have less than 50 students and 54 per cent have less than 100. About 77 per cent of schools have less than 200 students. The proportion of small schools in the government sector is relatively higher than in the private sector. The preponderance of small schools not only affects the quality of teaching and learning, but also makes school education inequitable and expensive in terms of per pupil expenditure. Such schools are neither academically nor financially viable.

These points are more or less similar to the points discussed in Chapter 3 on the basis of the ASER data. With the Committee making these points, it is safe to say that the government is now also aware of all that is wrong and what needs to be corrected. In fact, the Committee made some recommendations on this front.

Here are a few recommendations that the Committee made:

a) The RTE Act requires that even a student who scores zero in all subjects or has not attended school for even a single day be promoted to the next class. It is important to maintain the link between promotion and learning outcomes, objectively measured through criteria such as attendance, test scores or examinations at the end of every class.

Since children who are assured of promotion to the next

class regardless of their performance become non-serious, the Committee has recommended that the no-detention policy should be continued only up to Standard V and exams need to be introduced after that by suitably amending the Right to Education Act.

The Committee has recommended the amending of the Right to Education Act to provide, in addition to infrastructure requirements, norms for learning outcomes which directly affect the quality of education. Furthermore, teachers "should be held accountable for failure to achieve learning outcomes within a prescribed time frame".

This is one of the most important recommendations of the Committee. The idea of teaching shouldn't be to just complete the syllabus, at least not in the initial classes. The teachers need to ensure that the basic learning outcomes of the ability to read, write and do basic maths are in place. In fact, the teachers would also have to be adequately sensitised to this fact. At the same time, the necessary training would also have to be given. This will require a fundamental reorientation of the system.

b) After learning outcomes, the most important recommendation of the Committee should have been on the teacher absenteeism front. Sadly, there are no magic potions available to set this problem right. Just like in the case of other Big Government problem areas, what it needs is strong political will.

As the Committee says: "Strong political and administrative will is needed to improve teacher attendance and discipline. Absenteeism and indiscipline have to be handled with the utmost strictness…. Teacher absenteeism, teacher vacancies and the lack of teacher accountability have destroyed the credibility of our school education system. These issues can be resolved only with strong political consensus; all efforts would otherwise be ineffective."

The trouble is that this is far easier said than done. Teachers are well organised and also a very important and influential part of the community in villages. In this scenario, whether any government will crack the whip on absenteeism

remains to be seen. My guess is that no government would want to take the risk. Take the case of a state like Uttar Pradesh. The state assembly elections are due in February and March 2017. The contest is expected to be three-and-a-half pronged (the half is for the Congress Party). Hence, alienating teachers, who have good influence at the local level, is the last thing a party would want to do, the educational outcomes be damned.

The Committee also found that the "selection of teachers has been a highly skewed operation, where the selection criteria normally include merit. However, extraneous factors relating to improper monetary considerations often become the decisive factor in the selection process".

Furthermore, "there has been no credible or reliable system of measurement of a teacher's output or performance – promotion or increments have generally had little correlation with merit or performance, the management of the educational manpower being largely non-transparent and arbitrary". The Committee has come up with a set of recommendations to set this right. But this would again mean taking on the unions. The problem is that, unless some accountability is built into the way teachers currently operate, nothing is going to change.

c) There are other recommendations of the Committee that have been made in order to improve teacher performance. The Committee has recommended compulsory licensing for teachers of both government as well as private schools, based on independent external testing, every 10 years. Furthermore, the Committee has recommended a two-month compulsory vacation training every five years for existing teachers. Interestingly, the Committee clearly states that "some drastic, even unpopular, measures will need to be taken to improve the quality of teacher education and teachers".

d) The Committee also talks about contract teachers. It says: "The appointment of unqualified and low-paid contractual teachers militates against the quality of teaching and learning." This is a very good example of perfect being the enemy of good, which is a part of all that Big Government stands for. Research

shows that contract teachers, who are paid significantly lower salaries than permanent teachers and have lower job security levels as well, do a much better job of producing learning outcomes in children. At the same time, they are less likely to be absent as well. What this clearly tells us is that the sharper incentives at work for contract teachers (of having a job from which they could be fired at any time) lead to their being more conscientious teachers, which more than makes up for their lack of formal training.[926]

It would have been great if the Committee had gone into some detail on the appointment of contract teachers (which many states are anyway doing) rather than simply ruling out the possibility of their utility altogether.

e) There is enough research evidence to show that private schools produce somewhat better learning outcomes than government schools. As the draft New Education Policy for 2016 points out: "Students in private unaided schools performed marginally better than [those in] government schools.... These findings suggest a serious challenge to the goal of 'equity in learning'."

The 'private school premium' is small, but positive. Also, the teachers teaching in private schools are not as well paid as the permanent ones teaching in government schools. The salaries of private school teachers are only around a third to a tenth of those teaching in government schools, but the teacher effort is greater in private schools.[927]

The trouble is that many of these private schools do not meet the physical infrastructure norms required under the Right to Education Act. Yet many of these schools provide a better education. The Committee has taken this into account and recommended: "Many private schools, located in slums and other congested areas, will not be able to do so because there is no space for building additional rooms or providing a playground. Such schools, even if they are providing good quality of education to poor children could face the threat of closure. The Committee is of the view that recognition of a school should not depend only on the availability of physical infrastructure, but also on an assessment of the quality of the education provided by these schools." The Committee wants

such decisions to be taken at the state level, instead of having blanket all-India provisions.

Also, the way the norms are currently structured, the government schools do not need to meet the infrastructure norms that are applied to private schools. The Committee has recommended that there should be "no discrimination between private and Government schools in the applicability of norms". This is a step in the right direction.

f) The Committee has also tried to address the poor quality of the B.Ed. (Bachelor of Education) courses on offer all across the country in a systematic way. It has recommended that integrated "4-year B.A./B.Sc./ B.Ed. courses … be introduced in all States". It has also suggested the introduction of a "5-year integrated course after Std. X for elementary school teachers". While on the face of it, this seems like a good suggestion, it again falls in the 'perfect being the enemy of good' trap. The question is: How many individuals would want to put in fourfive years of their lives towards training to become teachers?

g) The Committee has also recommended the merger of small schools in the same neighbourhood to make them more viable. "With merger and consolidation, teacher availability will improve due to redeployment, and it will also be possible to appoint full-time principals/headmasters for schools with viable student populations. It will also be possible to provide better sports infrastructure, computer and science labs, and facilities for extracurricular activities."

Like most committees set up by the Indian government to study an issue and come up with recommendations, the Subramanian Committee Report did a good job of identifying the problems facing Indian education and coming up with recommendations to tackle these problems. The question is whether these recommendations will be implemented or they will be confined to the dustbins of history, like most recommendations made by most committees set up by the government over the years.

****

From the way things stand as of now, it doesn't seem like the government is serious about implementing the many recommendations of the Subramanian Committee. In fact, the title of the Subramanian Committee was changed, with the original words 'Drafting Committee' being dropped. As Subramanian said during the

course of an interview: “We have done wholesale criticism. Unfortunately, there is nothing to praise. We showed [them] the reality.”[928]

During the course of the same interview, Subramanian said that the full report had not been published and only extracts had been published. In fact, in late June 2016, the Ministry of Human Resource Development came up with another document titled *Some Inputs for the Draft National Educational Policy*.

The draft National Educational Policy (NEP) starts with the following line: “India has always accorded high importance to education.” The fourth paragraph goes on to point out: “The concern for the improvement of education had been at the top of India’s development agenda since Independence.”

A few pages later, the draft NEP contradicts itself when it says: “The relatively slow progress in reducing the number of non-literates continues to be a concern. India currently has the largest non-literate population in the world, with the absolute number of non-literates among the population aged 7 and above being 282.6 million [28.26 crore] in 2011.”

So, if India has accorded such high importance to education, why do around one in four Indians continue to be illiterate? This is nearly seven decades after Independence. Over and above this, India also has the maximum number of youth and adult illiterates in the world. The youth literacy rate (15-24 years) is at 86.1 per cent, whereas the adult literacy rate (15 years and above) is at 69 per cent.

To cut a long story short, the ‘concern for the improvement of education’ has hardly been at the top of India’s developmental agenda. In fact, if that had been the case, things would not have been as hopeless as they currently are. Furthermore, it needs to be pointed out that only in a document written by a faceless bureaucrat (the document doesn’t name the author) could something as ridiculous as this have been written.

After the initial spin, the draft NEP cuts to the chase in identifying what is holding back the Indian education system. As it points out: “The biggest challenge facing school education relates to the unsatisfactory level[s] of student learning. The findings of the National Achievement Surveys (NAS) covering Grades III, V, VIII and X suggest that [the] learning levels of a significant proportion of

students do not measure up to the expected learning levels."

The draft NEP further points out: "In 2014-15, the retention rate at the primary level was 83.7 per cent, and it was as low as 67.4 per cent at the elementary level. This indicates that, roughly, four in every 10 children enrolled in Grade I leave… school before completing Grade VIII."

It then goes on to blame a number of factors for this, including student and teacher absenteeism.

And how does the draft NEP hope to tackle a problem as serious as teacher absenteeism? As it points out: "Issues relating to teacher absenteeism… and lack of teacher accountability will be resolved with strong political consensus and will." The draft NEP does not specify just how the government will go about achieving this 'strong political consensus and will'. A document running into 43 pages could have spent a few paragraphs discussing this, given that it is one of the most important issues holding back the Indian education system.

The draft NEP also says that: "Principals/ head teachers will be held accountable for the academic performance of the school and its improvement." It further points out: "Programmes for enhancing the… accountability of teachers to deliver quality education… will be accorded priority." Nevertheless, as Geeta Kingdon puts it: "But who will do these in what time frame is not specified."[929]

The draft NEP also talks about the need for greater public investment in education. It points out that the earlier National Policies of 1968, 1986 and 1992 had recommended that 6 per cent of the GDP should be the national outlay on education. The actual expenditure on education in recent years has remained at around 3.5 per cent of the GDP. This needs to go up, the Subramanian Committee also suggests.

The immediate conclusion that one draws from this is that Indian teachers are not well paid. This, as we have seen in Chapter 3, is incorrect. In China, where the overall literacy rate is 95 per cent and the literacy rate between the ages of 15 and 24 is nearly 100 per cent, an average teacher's salary is the same as the per capita income.[930] In India it is about three times the per capita income. In states like Uttar Pradesh, it is nearly 17 times the state's per capita income.

In fact, there is another way of showing that way too much money

is being spent on teachers. In 2014-2015, there were 10.53 lakh public elementary schools in the country. Of these, around 3.72 lakh schools had 50 or fewer students. The average number of students per school was 29. This meant a teacher-student ratio of 12.7 pupils per teacher and Rs. 40,800 being spent per year per child, leading to a teachers' salary bill of Rs. 41,630 crore. Kingdon calls it "a diabolical and unconscionable wastage" of public resources "on pedagogically unviable tiny schools".[931]

The Subramanian Committee report had called for the merging of schools. The draft NEP suggests something along similar lines when it says: "Efforts will be made to convert existing non-viable schools into composite schools for optimum utilisation of human, physical and infrastructural resources, better academic performance and cost-effective management."

The trouble is that this will continue to remain a pipe-dream unless the issue of teacher accountability is addressed, which the draft NEP in its current form clearly doesn't.

The Right to Education essentially guarantees to every child between six and 14 the right to free and compulsory education in a neighbourhood school. If there was no school in a particular neighbourhood or area, the Right to Education Act called for its establishment within a period of three years of the commencement of the Act by the appropriate government and local authorities.

Between 2011 and 2015, the number of public schools went up by 9,448. Despite this, the total number of students studying in these schools fell by 1.13 crore. During the same period, the enrolment in private schools rose by 1.85 crore students.[932]

What this tells us very clearly is that anyone who is in a position to pull out his or her children from government-run schools is doing so. Hence, the issues of teacher accountability and learning outcomes need to be addressed quickly.

The draft NEP is on target regarding learning outcomes. As it states: "In most cases, the learning assessment is limited to testing the students' ability to reproduce content knowledge. The whole assessment system needs to be revamped to ensure comprehensive assessment of the students, including learning outcomes relating to both scholastic and co-scholastic domains."

It also makes the right noises about teacher training, about which it states: “It will be made mandatory for all in-service teachers to participate in training/professional development programmes once in every three years.”

It also talks about the non-detention policy of students being limited to Standard V. These recommendations are in line with the recommendations of the Subramanian Committee report.

But they will turn out to be as good as useless if strong steps are not taken to rein in teacher absenteeism and introduce some teacher accountability. The draft NEP states that its “main thrust will be to devise effective strategies to address the divergent challenges for the growth of education in India and realising the potential of the country’s ‘demographic dividend’”. While that sounds great on paper, again this can be taken seriously only if the government works seriously on teacher absenteeism as well as accountability.

Furthermore, like the Subramanian Committee, the draft NEP also talks about doing away with contractual teachers, who are doing a much better job of teaching than the permanent ones.

The Subramanian Committee and the draft NEP of 2016 also talk about using information technology “as a vehicle for monitoring and management”. In fact, some experiments have already been conducted on this front, and the results are encouraging. In the Udaipur district, digital cameras were used in single-teacher rural schools run by an NGO to monitor teacher attendance. At the same time, teachers were given a financial incentive to reduce their absence. Teacher absenteeism had stood at around 44 per cent and was nearly double the all-India rate.[933]

Teachers were given tamper-proof cameras. They were supposed to ask students to take date-stamped photos of them and other students at the beginning as well as at the end of the school day. This provided proof of whether or not the teachers were present. Their salaries were linked to their attendance.[934]

What were the results? As Sandip Sukhtankar and Milan Vaishnav write in the research paper titled ‘Corruption in India: Bridging Research Evidence and Policy Options’: “Comparing attendance for teachers who were given cameras and incentives with a control group who did not receive either, the authors found that absence was reduced by 50 per cent in the treatment classrooms. More importantly,

teacher attendance actually translated into improved educational outcomes for the students."[935]

Another experiment was carried out in Andhra Pradesh. Teachers in 300 government schools in the state were offered an incentive that gave them a bonus of up to three per cent of their salary based on the performance of their students in tests. After two years, it was observed that students did better in maths and language, the two subjects whose results were linked to the teachers' receiving of bonuses. What was also observed was that test scores also improved in subjects whose results were not linked to the teachers' receiving of bonuses. What this tells us is that the greater teaching effort of the teachers spilled out on to other subjects as well and wasn't just limited to the subjects linked to their bonuses.[936]

The success of this experiment tells us that more such solutions need to be looked at.

Neither the Subramanian Committee nor the draft NEP of 2016 talk about taking any measures on the demand side, where people can actually have some bargaining power. A bunch of the problems facing the education system in India can be tackled by looking at the problem differently. As Joshi writes: "There is a crucial distinction to be made between, on the one hand, the state paying for goods and services and, on the other hand, the state producing goods and services."[937] What does this mean in the context of education? It essentially means that the coupon system discussed in Chapter 12 in the context of the Public Distribution System (PDS) would work just fine in the case of the education system as well.

The basic idea behind the coupon system is fairly straightforward. Rather than run a terribly leaky PDS to distribute subsidised rice and wheat, the government should simply hand over coupons (or simply cash in their *Aadhaar*-enabled bank accounts) to people who are the intended beneficiaries of the subsidy. These coupons can then be used by people to buy subsidised grains directly from the open market instead of the fair price shops they are currently forced to visit.

Also, if one shopkeeper tries to adulterate the product, the buyers can always move on and buy from any other shop. Hence, the system would create some competition among the shopkeepers. A similar system which hits at the heart of Big Government can be envisaged for the education system as well.

Instead of setting up schools in every neighbourhood, as the Right to Education Act mandates, the government can simply hand over education vouchers to the parents of students. The parents can then use these coupons and decide which school in the neighbourhood to send their children to. This system would give parents some sort of bargaining power in deciding which school to send their children to. Also, schools which do well would get more vouchers, which, in turn, would mean more money from the government.

It would also make teachers more accountable, given that schools which do not attract enough students would either have to be shut down or be merged with other schools. The point is that, unless the system manages to create some sense of competition between schools in order to attract students, the issue of teacher accountability and absenteeism will not get solved on its own.

Of course, all this would mean that Big Government in education would have to get sidelined. And no government would want anything like that to happen.

****

The world over, the youthful population is fast shrinking and the dependency ratios (where more and more old people are dependent on fewer youth) are going up. But this is not true for India. It is one of the youngest nations in the world. More than 54 per cent of India's population is under 25 years of age.[938] Some of these individuals have already entered the workforce, and some of them will do so in the years to come.

As per an estimate made by the Ministry of Human Resource Development, 10.46 crore fresh entrants are expected to enter the workforce between now and 2022.[939] This means that around 17.5 million (1.75 crore) individuals will enter the workforce, on an average, every year between 2016 and 2022.

Pay careful attention to the number 17.5 million. This is more than any of the other estimates of the number of individuals entering the workforce every year that we have seen until now. The other estimates are scattered around about one million individuals entering the workforce every month. But this estimate works out to around 1.5 million (15 lakh) individuals entering the workforce every month, which is significantly higher than the earlier estimates.

Whether it's one million individuals or 1.5 million individuals who eventually end up entering the workforce every month, only time will tell. But either way, this is India's demographic dividend. And if this has to be cashed in on, jobs need to be created for India's masses. But that is not happening. To explain why, we need to understand the fundamental problem with the Indian economy right now.

The GDP, or the size of any country's economy, can be measured in various ways. One is through estimating the size of various industries. The other way of measuring the GDP is by measuring the different kinds of expenditure. This essentially is the sum of the private consumption expenditure, the government expenditure, investments and the net exports (i.e., exports minus imports). It is a measure of economic activity in a country during a given period.

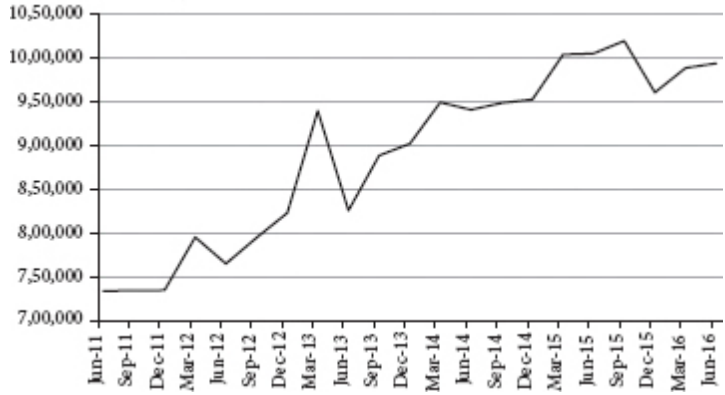
If one were to look at the expenditure way of estimating the GDP, it is easy to see that the gross fixed capital formation in 2016 has fallen in comparison to 2015. Between June 2015 and June 2016, it had fallen by 1.1 per cent (in nominal terms). (See Figure 14.1.)

Gross fixed capital formation is basically a proxy for the investment happening in the economy. (At a more technical level, it measures the net increase in the physical assets of an economy during the measuring period, but we don't need to get into that.)

As can be seen from Figure 14.1, the gross fixed capital formation has seen a rather slow increase over the past five years. In fact, the rate of increase between June 2011 and June 2016 is a rather modest 6.3 per cent (in nominal terms) per year. Any growth in nominal terms does not adjust for inflation.

If we were to adjust for inflation, the growth in the gross fixed capital formation over the past five years turns out to be a little less than 3 per cent per year. For an economy like India, this is clearly not good enough. Given that investment is growing at a fairly slow pace, it isn't surprising that not enough jobs are being created.

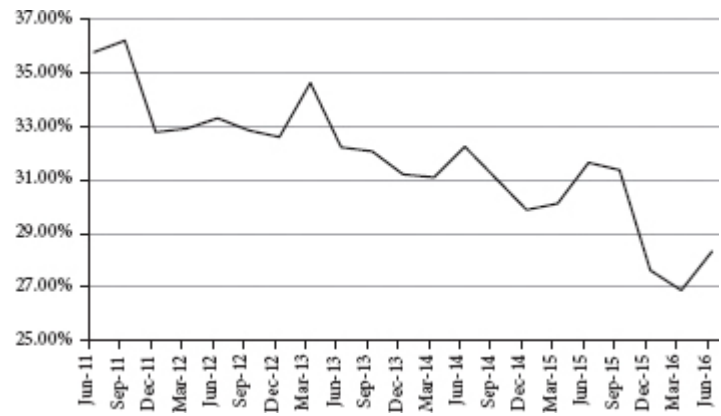
Figure 14.1: The gross fixed capital formation between June 2011 and June 2016 (in Rs. crore).



Source: Centre for Monitoring Indian Economy.

Now take a look at Figure 14.2. This shows how the gross fixed capital formation (which, I remind you, is a proxy for investment) as a proportion of the nominal GDP has fallen dramatically between June 2011 and June 2016.

Figure 14.2: The gross fixed capital formation as a proportion of the GDP between June 2011 and June 2016.



Source: Centre for Monitoring Indian Economy.

As of June 2011, the gross fixed capital formation as a proportion of the GDP had stood at 35.8 per cent. Since then, it has fallen to 28.3 per cent. This basically means that investment as a part of economic activity (as measured by the GDP) has fallen dramatically over the last five years.

During the same period, government expenditure has picked up, and this, to some extent, has kept the growth going. But the government does not form a big part of the economy (it's at around 12-13 per cent of the GDP) to be able to drive overall economic

growth *all the time*. To put it simply, an increase in government expenditure to drive economic growth can be the icing on the cake, but certainly *not the cake itself*.

This basically means that investment (or gross fixed capital formation) needs to pick up if the Indian economy needs to keep growing in the days to come. Once investments pick up, only then will jobs be created and the demographic dividend begin to get cashed in on. This would then lead to further economic growth.

****

There are several short-term factors holding Indian investment back. The capacity utilisation rates of the manufacturing sector continue to remain low. For the period from January to March 2016, the 1,058 companies surveyed by the Reserve Bank of India reported a capacity utilisation rate of 74.1 per cent.

This was almost unchanged from the corresponding capacity utilisation rates of these companies between January and March 2015. This basically means that the companies aren't fully utilising their existing capacities, and hence, there is no need for expansion. This means no new investments, which, in turn, means no new jobs, and so, ultimately, no cashing in on the demographic dividend.

Another reason why investment is not picking is because a substantial part of the Indian private sector is highly leveraged (i.e., they have borrowed much more than they are in a position to repay). Furthermore, there have been huge corporate loan defaults, and this has led to distress in the public banking sector. This is a Big Government factor, with the politicians over the years having forced these banks to lend to many crony capitalists, who are no longer in a position to repay their loans. The banks haven't been able to do much about recovering these loans (as we saw in Chapter 11).

As of March 31, 2016, the gross non-performing loans (or bad loans) of the public sector banks had stood at 9.32 per cent of the total loans. This has led to a situation wherein these banks are not interested in lending to construction companies, in particular, and corporates, in general.

One sector which has been particularly impacted is the construction and real estate sector (including the construction materials sector). Between June 2011 and June 2016, the total

amount of money riding on outstanding projects in the construction sector had fallen by 4 per cent.[940]

In June 2011, construction projects formed around 12.9 per cent of the total outstanding projects. This has come down to 9.8 per cent in June 2016.[941] This is indeed worrying for multiple reasons. The physical infrastructure in India continues to be appalling. For a programme like *Make in India* to take off, the physical infrastructure needs to improve. For this, the construction sector needs to pick up.

Furthermore, as we saw in Chapter 6, construction is a huge job creator in India's natural area of comparative advantage, which is unskilled and low-skilled labour. The sector employs around 4 crore people in direct and indirect jobs. Over and above this, it has major forward (infrastructure, real estate, manufacturing) and backward (steel, cement, etc.) linkages. This leads to a multiplier effect of almost two times, i.e., one rupee spent on the sector adds two rupees to the GDP. Furthermore, the sector creates 2.7 jobs for every Rs. 1 lakh invested.[942]

Hence, the job creation potential of the construction and related sectors is huge. This in an era when Indian economic growth is driven by less labour-intensive sectors, like business and financial services as well as information technology and information technology-enabled services. As we saw earlier, these sectors require only one or two people to produce Rs. 10 lakh of real value added to the GDP. This basically means that faster growth in these sectors does not necessarily translate into jobs.[943] And this contributes to what economists refer to as *jobless* growth.

The question is: Why has construction activity fallen? Some of the reasons, like the bad loans of banks, have already been explained above. In fact, banks have an exposure of Rs. 3 lakh crore to construction firms. Around 45 per cent of these loans are under stress.[944] This basically means that the borrower has either stopped repaying the loan or the bank has had to restructure the loan.

Another major reason for the slowdown in construction is the difficulty in land acquisition. No construction can happen without land being available. This, as we saw in Chapter 8, is another Big Government issue, which can only be solved if the land titles system throughout the country sees a substantial improvement from the way things currently are.

It is estimated that there are 3 crore cases pending across various courts in India. Of these cases, around 80 per cent are civil cases, and a greater part of civil cases are, in one way or another, essentially landrelated disputes.[945]

Hence, clear land titles need to become the order of the day if the construction and real estate businesses need to pick up in a big way. Other than Rajasthan, the state of Karnataka has done good work on this front as well.

The Revenue Department of the state has computerised land ownership records of 67 lakh farmers in the state. As the document titled *Success Stories on the National Land Records Modernisation Programme*, released by the Department of Land Resources, Ministry of Rural Development, points out:

> Previously, farmers were solely dependent on the Village Accountant (the village-level functionary of the Revenue Department in Karnataka) to get a copy of the Record of Rights, Tenancy and Crops (RTC). RTC is a document needed for many tasks, such as obtaining bank loans, selling properties, creating partition deeds, etc. There were delays and harassment. Bribes had to be paid. Today, for a fee of Rs. 10, a printed copy of the RTC can be obtained online at computerised land record kiosks (*Bhoomi* centres) in 203 *taluk* offices.

Other states need to move towards such systems in the years to come.

Getting back to the state of the construction industry in the country, a report commissioned by the business lobby CII (Confederation of Indian Industries) pointed out other reasons for the slowdown in the sector as well. A major reason for the debt of construction companies, feels the CII, are the pending claims from various government bodies. These claims amount to 150 per cent of the debt of the construction companies. The average settlement time for these claims is 7.5 years. In 2014-2015, the National Highways Authority of India paid out only 8 per cent of the claimed amount.[946]

Given this, “most companies are barely able to cover interest costs from earnings. Increasing debt levels remain a critical issue affecting financial stability and borrowings. Several factors have contributed to this stress, e.g., in stalled assets in the infrastructure sector and high levels of receivables [i.e., payments due but not received], especially from… government entities”. Claims raised by contractors are “pending either in the arbitration proceedings or in courts”.[947]

This leads to the money due to these construction firms getting blocked. They end up borrowing more and, after some time, find it difficult to repay their loans. In the process, there is a slowdown in economic activity and the process of job creation. If the construction sector is to pick up and jobs are to be created, this needs to get unclogged. On August 31, 2016, the Cabinet Committee on Economic Affairs (CCEA), led by the Prime Minister, came up with a solution that is likely to give the construction industry some fillip (until demonetisation played spoilsport with it, as we shall see later in the chapter).

Before we come to what the Modi government did, it is important to understand that most arbitral awards go against the government bodies, which block payments to construction firms. Take the case of the National Highways Authority of India. Out of a total of 347 arbitral awards, only 38 have gone in favour of the authority.[948]

Typically, even after an arbitration award has gone against the government, the money is not released to the construction firm. This is because the case then gets appealed in a higher court.

To deviate slightly from the issue at hand, in the 1990s, the economist Bibek Debroy headed a project under the Ministry of Finance and discovered that the backlog in India's legal system was more than 2.5 crore cases. It took up to 20 years to settle a dispute then.

As Gurcharan Das writes in *India Grows at Night* on this:[949]

> What shocked the nation's conscience was that the main culprit behind judicial delay was the government, which appealed all judgements automatically and proceeded to lose them again in the higher courts…. The problem lay in the fact that the decision to litigate was made at the lowest level in the bureaucracy, but the decision not to litigate was made at the highest level. If this process were to be simply reversed, government litigation would come down.

This essentially explains what had been happening between different government bodies and construction firms, with cases being appealed in higher courts and the payments getting stuck meanwhile. In fact, courts generally tend to "uphold the arbitrators' decisions", but "referring claims to courts leads to a delayed pay-out by about 2.5 years".

Taking this factor into consideration, the government has decided that, in a situation wherein an arbitration award goes against a government body, 75 per cent of the contested amount will be paid to

the construction firm into an escrow account. This will happen even if the government body decides to challenge the award in a higher court. This will be done against a margin-free bank guarantee. An escrow account is essentially a third-party bank account into which money is transferred.

The CCEA estimates that "Rs. 70,000 crore is tied up in arbitration. Over 85 per cent of the claims raised against Government bodies are still pending, of which 11 per cent are pending with the Government agencies, 64 per cent with arbitrators and 8.5 per cent with courts". It is this money that needs to get unclogged if the construction sector is to get going again, at least in the short term.

The hope is that, with the government deciding to pay 75 per cent of the claimed amount if an arbitration decision goes against it, some money is likely to be released to the construction firms, and so, the total amount will not get blocked. An estimate made by *The Financial Express* suggests that this decision of the government would release Rs. 20,000 crore to the cash-starved construction companies and help them get going all over again.[950]

This would lead to the creation of jobs for low-skilled and unskilled workers, which is India's natural comparative advantage. It is worth remembering what the Economic Survey of 2015-2016 points out: "Projections suggest that India's working-age population share will continue rising till about 2035-2040, meaning that India has another 25 years— one more generation—to exploit this dividend. Demography in other words is opportunity, not destiny."

Given this, trying to get the construction sector up and running again is one step towards that direction. But much more needs to be done, and this, as we shall see, includes limiting Big Government in other areas.

****

The Narendra Modi government is also betting big on roads (a part of the construction sector) and the Railways in order to create low-skilled jobs. Let's take a look at the Railways in a little more detail. As we saw in Chapter 6, the Modi government has major plans for the Indian Railways. The Railways has long been exploited by various railway ministers from the eastern part of the country (with the likes of Abdul Ghani Khan Choudhury, Ram Vilas Paswan, Lalu Prasad Yadav and Mamata Banerjee). These ministers abused India's largest

employer for their own political gains and left it worse off.

Over the years, the quality of services offered to the passengers fell dramatically. The current Railways Minister, Suresh Prabhu, is trying to set this right. One of the basic problems with Indian Railways is that the freight services subsidise passenger services big time. This has been the case for a long period of time, and things continue to be this way.

Passenger fares are rarely raised. This has led to a situation wherein people have got used to the idea of ticket prices (especially for the suburban trains which ply primarily in Mumbai, Kolkata, Delhi and Chennai) not going up at all. Any whiff of an increase in the price of passenger tickets typically leads to large protests.

Hence, the freight earnings bring in a major portion of the revenue for the Indian Railways. In 2014-2015, for every Rs. 100 earned by the Railways, freight operations brought in Rs. 66. On the other hand, passenger services brought in only Rs. 26.

The Economic Survey of 2014-2015 estimates that the subsidy on the passenger operations of Indian Railways works out to Rs. 51,000 crore (or 0.57 per cent of the 2011-2012 GDP). As is the case with most subsidies, this subsidy also does not reach the poor. As the Survey points out: “The bottom 80 per cent of passenger households constitute only 28.1 per cent of the total passenger thoroughfare on the railways.”

If one looks at the ratio of the average passenger fare to the average freight rates, India has one of the lowest ratios in the world, at 0.3. In the case of South Korea and China, the ratios are 1.4 and 1.2, respectively. In the case of Malaysia and Indonesia, the ratios are at 0.9. For Thailand, the ratio stands at 0.7. Countries like Pakistan and Vietnam are at the same level as India, at 0.3.[951]

Until now, railway ministers got around this problem by raising freight charges in almost every budget. One result of this has been that railway freight operations have lost out to road transport over the years.

In 1950-1951, Indian Railways moved 90 per cent of all transported goods. By 2011-2012, this had come down to 35 per cent. In fact, for 2016-2017, the National Transport Development Policy Committee expects the ratio of railways to road transport in the

movement of goods to be at 35:65.[952]

As Prabhu said in the Rail Budget speech he made in February 2016: “Indian Railways typically has focused on increasing revenues through tariff hikes. We want to change that and challenge our conventional thinking on freight policies to win back our share in the transportation sector.”

The point is that, after many years, we at least have a minister who realises what the problem is. Tariff hikes in freight services have made them unviable in comparison to road transport. As Prabhu said during the course of his speech: “A review of the tariff policy will be undertaken to evolve a competitive rate structure *vis-à-vis* other modes.”

What has not helped is the fact that freight earnings are not growing at the pace they were expected to. In 2015-2016, the Railways had hoped to earn (i.e., it had budgeted for) Rs. 1,21,433 crore. The actual earnings when Prabhu made the Rail Budget speech in February 2016 were projected to be at Rs. 1,11,853 crore. This was around 5.7 per cent higher than the freight earnings in 2014-2015, but lower than the target set at the beginning of 2015-2016.

The financial year 2016-2017 hasn’t gone well for freight movement by the Indian Railways. Between April and November 2016, the total amount of freight moved was down by 0.9 per cent in comparison to the same period in 2015.

Indeed, this is worrying, because this is happening at a time when the Indian Railways is trying to create capacity through new lines and gauge conversion. It is also trying to provide better passenger amenities. As Prabhu put it in the February 2016 budget speech, the Railways “will target doubling average speeds of freight trains and increasing the average speed of superfast mail / express trains by 25 kmph [i.e., kilometres per hour] in the next 5 years.”

All this will need higher investment from the Railways, basically money, which it doesn’t have. The heavily subsidised nature of the passenger services essentially ensures that the Indian Railways does not generate enough resources internally to be able to finance its ambitious expansion plan.

The Life Insurance Corporation (LIC) of India is funding railway

projects, and has agreed to invest Rs. 1.5 lakh crore over the next five years. While this has been hailed as a brilliant move by the Modi government, things need to be seen with a little more perspective. The money that the LIC will invest in the Railways is not money belonging to the Government of India. This is money that has been raised through lakhs of investors investing in the so-called insurance policies of the LIC. I say 'so-called' primarily because most of these policies are investment plans masquerading as insurance policies. Very few of the policies sold by the LIC are actually insurance policies.

Hence, the money that the LIC will invest / has invested in the Railways is basically the hard earned income of many Indians from all across India. The question is: Should retail investor money be used in financing long-term infrastructure projects, where returns are not immediately obvious? Should the small investor essentially be subjected to this risk? To elaborate on this point a little bit more, would a mutual fund or private life insurance company be allowed to carry out similar kind of lending to fund a long-term infrastructure project? The answer is no.

Furthermore, by getting the LIC to finance the expansion of Indian Railways, the government has managed to borrow money without the debt showing up on its books. Nevertheless, given the risk involved, this expansion should have directly been funded by the government. Indeed, this would have been possible if Big Government had decided to let go of its control of the twenty-seven public sector banks.

For 2016-2017, the government has budgeted Rs. 25,000 crore for the recapitalisation of public sector banks. This money could have easily gone towards the infrastructure plans of Indian Railways. Over and above this, there is a lot of other expenditure that the government incurs every year in order to keep many loss-incurring public sector enterprises going. Air India, MTNL and Hindustan Photo Films are the three best examples.

All the money going towards these companies could easily go towards Indian Railways, or even the massive road-building programme launched by the Ministry of Road Transport and Highways. The government only has a given amount of money to spend, and it should spend that money wisely in areas where the bang for the buck is the maximum.

Take the case of Indian Railways. As Prabhu put it in his February

2016 Budget Speech: “Every rupee of investment in the Railways has the capacity to increase the economy-wide output by Rs. 5. The impact that this increased investment in the Railways will have on the economic growth of the country is unprecedented.” What this means is that every single rupee invested in the Railways would add Rs. 5 to the overall economy. Essentially, the multiplier effect of investment in the Railways is huge, given that very little money has gone into it over the years.

The multiplier for construction is 2. Furthermore, both these sectors are likely to create many jobs for low-skilled as well as unskilled workers, which is what the Indian economy really needs to target.

Now compare this to what happens when the government spends money in recapitalising banks as well as ensuring that loss-incurring public sector enterprises keep running. This essentially ensures that a few lakh employees continue to benefit. Almost no new jobs are created at the lower end of the spectrum.

The fear is that any action against the incumbents who benefit from the largesse of the government would lead to protests from the trade unions. The trouble is that these trade unions punch much above their weight, and the noise that they can create has a lot of nuisance value. Nevertheless, it’s sad that the fear of half a dozen trade unions is what will determine the direction that India takes in the years to come.

To be honest, the Modi government has made some headway on the front of shutting down loss-incurring public sector enterprises. On September 28, 2016, the union cabinet, led by the Prime Minister, decided to shut down Hindustan Cables Ltd. Hindustan Cables has had no production activity since January 2003. Take a look at Table 14.1. The company accumulated losses of Rs. 5,847 crore in the decade spanning 2005 and 2015. What’s more, the losses kept increasing over the years.

Table 14.1: Losses incurred by Hindustan Cables Ltd. between 2005 and 2015.

Year	Losses (in Rs. crore)
2014-2015	933
2013-2014	782
2012-2013	885
2011-2012	648

2010-2011	607
2009-2010	506
2008-2009	445
2007-2008	435
2006-2007	311
2005-2006	295
Total	**5,847**

Source: Public Sector Enterprises Surveys.

In 2014-2015, the company incurred total losses of Rs. 933 crore. It was sixth in the list of the ten largest loss-incurring public sector enterprises in India. In fact, it has constantly been in the list of the ten largest loss-incurring public sector enterprises since 2005-2006.

Given that it has not produced anything since 2003, the closure has taken way too many years to finally happen. Other than the losses, the company has also managed to accumulate a huge amount of debt. As of March 31, 2015, the company had a total debt of Rs. 5,963 crore. And, not surprisingly, the interest that needs to be paid on this debt was the biggest expense of the company.

In 2014-2015, the total interest on the debt amounted to Rs. 747 crore. The company stopped production in 2003. Given this, it has not been earning anything from its operations. In this scenario, in order to continue paying the employees on its rolls, it has had to borrow money. Employees' remuneration and benefits, at Rs. 113 crore, was the second largest expense of the company.

And how many employees did the company have? As on March 31, 2015, it had 1,533 employees. The number of employees as on March 31, 2013 was 1,832.

This basically means that the government chose to run a loss of Rs. 933 crore in 2014-2015 just so that 1,500 people continued to have a government job. By keeping Hindustan Cables and many other such companies alive, the government has gone around wasting the hard earned money of taxpayers over the years.

The good part is that, now that it is shutting down, the government will no longer have to bear the losses of the company. The government bears losses of the loss-incurring companies in two forms. One is by putting money into the company every year to keep it going. Or it ultimately has to take on itself the entire debt that the company

takes on to keep itself going. The financial system lends to the company despite it not making any money because it knows that, ultimately, they are lending to the government of India. And nothing is deemed to be safer than lending to the government.

The other good thing that will happen is that the government will end up with a lot of land (on which any public sector enterprise like Hindustan Cables sits). The 2014-2015 annual report of Hindustan Cables points out that the company got land free of cost from the state governments of West Bengal and the erstwhile Andhra Pradesh. This land should be returned to the states and can become a part of their respective land banks, which they can use to attract industries.

This is very important, given that the land acquisition policy in the country remains a mess. Hence, land from public sector enterprises which are shut down can be an important source of land in the short-to-medium term for a programme like *Make in India* to take off.

Furthermore, it is important that the government continue with this and shut down more loss-incurring public sector enterprises in the time to come, especially those companies which haven't been producing anything for a while.

Take the case of Hindustan Photo Films Manufacturing Company Ltd., which we discussed earlier in Chapter 2. Between 2004-2005 and 2014-2015, the company had accumulated losses of Rs. 12,432 crore.

Table 14.2: Losses incurred by Hindustan Photo Films Manufacturing Company Ltd. between 2004 and 2015.

Year	Losses (in Rs. crore)
2014-2015	2,164
2013-2014	1,820
2012-2013	1,561
2011-2012	1,352
2010-2011	1,157
2009-2010	1,003
2008-2009	876
2007-2008	789
2006-2007	653
2005-2006	561
2004-2005	496
Total	**12,432**

Source: Public Sector Enterprises Surveys.

In 2014-2015, the company incurred total losses of Rs. 2,164 crore. It was fourth in the list of the ten largest loss-incurring public sector enterprises. In fact, it has constantly been in the list of the ten largest loss-incurring public sector enterprises since 2004-2005.

The funny thing is that the company was referred to the Board for Industrial and Financial Reconstruction (BIFR) under the terms of the provisions of the Sick Industrial Companies (Special Provisions) Act, 1985, in October 1995.

Interestingly, the BIFR had confirmed its opinion for the winding up of the company in an order in January 2003. Since then, the company has continued to exist and accumulate losses as well as debt. The total debt of the company as on March 31, 2013 had stood at Rs. 7,692 crore. This debt had been taken on in order to ensure that the company continues to operate despite incurring losses.

As in the case of Hindustan Cables, the total production of the company has more or less collapsed. During 2012-2013 (the latest annual report that I could find), the total production of the company had stood at Rs. 3.6 crore. The sales had stood at Rs. 3.7 crore. Now, imagine who in their right minds would run a company with sales of under Rs. 4 crore and which ends up with losses of more than Rs. 1,500 crore, as it did during the course of that year.

The most obvious explanation is that these losses helped people continue to have jobs. So how many people does Hindustan Photo Films employ? As of March 31, 2013, it employed 687 individuals. This had fallen to 348 by March 31, 2015.

What does this mean? That the government chose to run a loss of Rs. 2,164 crore in order to keep 348 people employed! Of course, all the money being spent was not going towards employee salaries. The biggest expense of such companies is paying the interest on the debt that they have accumulated over the years. In order to pay this interest, they need to take on more debt. A perfect Ponzi scheme, if ever there was one.

When companies borrow to survive, their structure becomes akin to that of a Ponzi scheme. They survive by borrowing and then using that money to pay off the interest on their outstanding debt, as well as the debt that needs to be repaid. In the case of government companies, this can go on endlessly, given that the lending is ultimately backed by the government.

Hence, it's about time that, along with Hindustan Cables, the government shut down Hindustan Photo Films and many other such

Ponzi schemes that it has been running for a while.

A September 2016 newsreport in *The Hindu* suggests that the Prime Minister's Office has given the go-ahead for closing down seventeen sick or loss-incurring government companies. Among the loss-incurring companies to be closed down are Indian Oil-CREDA Biofuels Ltd., CREDA HPCL Biofuel Ltd., National Jute Manufacture Corporation Limited, Birds Jute & Export, and Bharat Wagon and Engineering.[953]

One advantage of shutting down these companies would be that the government won't have to keep funding their losses. Over and above this, these companies own a good amount of land, which could be monetised by the government in various ways or simply given back to the state governments. Other than shutting down 17 companies, the Prime Minister's Office has also given the go-ahead for reducing government ownership in 22 public sector companies to below 51 per cent. The government does not want to exit these companies, but wants to become a minority shareholder. This list includes companies like Pawan Hans Limited, Scooters India Limited and Cement Corporation of India Limited. It also includes three steel plants of the Steel Authority of India (SAIL), at Salem, Durgapur and Bhadravati.[954]

This will be a real test for the Modi government. As and when it decides to push through these decisions, there are bound to be protests by the incumbents who have benefited from the *status quo* until now, not to mention the trade unions. It will be interesting to see whether the government takes them on or decides to buckle under pressure. That time alone will tell.

In fact, more than the government, the entire process of gradually getting rid of the loss-incurring public sector enterprises depends on what Prime Minister Modi thinks about the entire issue. Only if he wants to push through major economic reforms will things move forward.

This is made more or less clear through what happened during the summer of 1991, when the PV Narasimha Rao-led government initiated big-bang economic reforms. Over the years, the credit for the big-bang economic reforms of 1991 has largely gone to Manmohan Singh, who was the Finance Minister in the Rao government between 1991 and 1996. But the fact of the matter is that no finance minister could have pushed through the economic reforms in what was till then

a socialist country without the help of the prime minister.

A major reason for Rao being confined to the dustbins of history is the fact that the Congress Party does not like to project anyone other than the Nehrus and Gandhis as having done something for this country. But this disconnect is now being set right, with a slew of new books being written on Narasimha Rao in the recent past, on the 25th anniversary of the economic reforms.

While the world is now getting around to the idea of just how crucial the role that Rao played during the summer of 1991 was, Rao himself never had any doubts about the role he played in initiating economic reforms. As Sanjaya Baru writes in the book *1991—How PV Narasimha Rao Made History*: "A few years before PV passed away, a former official of the Finance Ministry asked him how much credit he would like to take for the reforms of 1991-92 and how much credit [he] would… give to Manmohan Singh."[955]

Like a good politician, Rao praised Singh and "acknowledged his loyalty and his contribution to reforms". "Then, in his characteristic deadpan manner, he said: 'A finance minister is like a numeral zero. Its power depends on the number you place in front of it. The success of the finance minister depends on the support of the prime minister.'"[956]

That one sentence says it all. The success of any significant economic reforms today depends on how much importance Prime Minister Narendra Modi places on them.

****

One of the themes that have been explored throughout this book is that the government needs to make a distinction between paying for goods and services and producing as well as distributing them. This would mean resorting to cash transfers in the case of many subsidised goods that it currently provides. One basic advantage of this, as we have seen earlier, is that it wouldn't violate the principle of one product-one price, which, in the process, would help bring down the massive leakages that currently take place.

Take the case of the foodgrains distributed through the fair price shops that constitute the public distribution system. This system suffers massive leakages, with the grains not reaching those they are intended for. In fact, for households, cash, instead of foodgrains,

would work better. For one, it would free them from the tyranny of the fair price shop owner supplying them with low quality grain. Cash would also create some competition in the system. With cash in hand, people can then decide where to buy their foodgrains from. In case the quality is bad, they can easily switch to another shop.

Another big advantage with cash transfers is that they are easy to monitor in comparison to the current way of doing things, in which goods are actually bought, transported and distributed. Furthermore, and more importantly, with cash in hand, people would have the option of buying other food items as well and could have a more nutritious diet in the process. Also, currently, migrant workers are not allowed to use their ration cards outside their place of residence. This would change, because they would be able to withdraw cash anywhere.[957]

One concern that is often raised against cash transfers instead of the government supplying foodgrains through the public distribution system is that the poor would spend the money on the consumption of alcohol and tobacco. Even in the current system of providing foodgrains, the government is not checking whether people are actually eating the subsidised foodgrains that they buy. They could easily be selling it and using the cash to buy other things.

In fact, as we saw in Chapter 12, this is not true. Nevertheless, the argument has a simplistic appeal to it, and that is why it is so powerful. In Chapter 12, we saw the case of SEWA carrying out a successful cash transfer programme for BPL families in West Delhi. A similar experiment was carried out by SEWA in the state of Madhya Pradesh.

Around 6,000 individuals (comprising both tribals and non-tribals) received small and unconditional cash transfers every month. An adult received Rs. 200 per month, whereas each child received Rs. 100 per month. After a year, the payments were increased to Rs. 300 and Rs. 150, respectively. In another part of the experiment, the tribals received Rs. 300 and Rs. 150, respectively, for the entire period of 12 months.[958]

The households which received the money essentially reported a “higher propensity to consume fresh vegetables and milk”. In fact, the tribal population which received cash “reported a substantial rise in the consumption of more nutritious food”. This included pulses,

vegetables, eggs, fruits, fish as well as meat. No evidence of any increased consumption of alcohol was found.[959]

Another concern that is raised against giving cash directly is that it would lead to a reduction in labour supply. The assumption here is that, if you give people money, they won't work. While that may or may not be true, one thing that there is enough evidence for is that higher incomes lead to people eating better. Their intake of proteins and micro-nutrients goes up. This boosts labour productivity significantly.[960]

While the SEWA experiment in Madhya Pradesh involved unconditional cash transfers, the government of Bihar has, since 2006, been running the Mukhyamantri Cycle Yojana (Chief Minister's Bicycle Programme). Under this programme, girls studying in Standard IX in a government school were provided Rs. 2,000 cash to buy a bicycle. In 2009-2010, the scheme was extended to boys as well. The cash payment was increased to Rs. 2,500 in 2011-2012, which is where it has stayed since then. In 2012-2013, one condition was added: only students with 75 per cent or higher attendance would receive money from the government to buy a bicycle.[961] Interestingly, this increased the enrolment of girls in secondary schools by 32 per cent.[962]

What is clear here is that the government of Bihar did not want to get involved in the hassle of procuring and distributing bicycles. One of the advantages of this was that the beneficiary was given the choice of buying the kind of bicycle that he or she wanted. Furthermore, if the government had decided to procure and distribute bicycles, the chances were that the corruption in the system would have gone up. Nevertheless, the question remains: Did the students who were given cash to buy bicycles actually do so? Or was the money spent on something else?

A primary survey carried out across 36 villages spread across six districts during the period between September and October 2012 threw up some very interesting results. Almost 98 per cent of the beneficiaries reported purchasing a bicycle using the money received under the scheme. Nearly 97.2 per cent reported buying a new bicycle. This is a very good example showing that the argument 'Give people cash and they will drink it away' doesn't really hold. Furthermore, 93.3 per cent of the beneficiaries reported receiving the correct amount of money. For the beneficiaries who received less, the

average difference from the entitled amount was Rs. 441. And most of this happened during 2011-2012, when the payment was raised from Rs. 2,000 to Rs. 2,500. We saw a similar example in the case of the MGNREGS in Odisha, wherein, when the per-day payments went up, almost the entire incremental amount was siphoned off.[963] A similar thing seems to have happened in Bihar as well.

Hence, the scheme had very little leakage, so to say. Despite this, the survey revealed that only 45 per cent of the beneficiaries preferred receiving cash to kind. This meant that the majority of the beneficiaries wanted the bicycle rather than the cash to buy the bicycle. There were several reasons for this.[964]

The scheme requires that, after a bicycle has been purchased, the receipt issued by the bicycle store needs to be submitted. The survey found that around 30 per cent of the beneficiaries had to submit the receipt before buying the bicycle. This basically meant that the beneficiaries either had to buy the bicycle out of their own funds or provide a fake receipt. Given this, it is not surprising that such beneficiaries would have preferred the government directly providing a bicycle rather than some money to buy it. The beneficiaries who had to submit a receipt before buying a bicycle were 20 percentage points less likely to prefer cash in comparison to those who had to submit the receipt after buying the bicycle.[965]

Also, 98 per cent of the beneficiaries had to add to the Rs. 2,500 that the government had provided to buy a bicycle. On an average, the beneficiaries spent an extra Rs. 979 to buy a bicycle. This basically meant that the government wasn't providing enough money to buy a bicycle, even though it left the choice of the bicycle to the beneficiaries. And this inadequacy of the cash transfer could be another reason why a major set of beneficiaries preferred bicycles over cash to buy those bicycles.[966]

Given that the Rs. 2,500 provided by the government wasn't enough to buy a bicycle, the beneficiaries (or rather, their parents and guardians)had to spend money to buy the bicycle. The survey showed that 72 per cent used their own money, whereas 25 per cent had to borrow money to buy a bicycle. Hence, the beneficiaries who had to borrow money were 16 percentage points less likely to prefer cash over kind than households using their own savings.[967]

Then there was the issue of how far away the beneficiaries lived from a bicycle shop. Beneficiaries who lived in villages that were at a distance from a bicycle shop preferred a bicycle rather than cash to buy it.

There are largely two points here. One is that cash transfers lead to better utilisation of the money that is being spent. At the same time, the government also needs to take into account whether the goods that are to be bought using the cash are readily available. As Maitreesh Ghatak, Chinmaya Kumar and Sandip Mitra write in 'Cash Versus Kind—Understanding the Preferences of the Bicycle Programme Beneficiaries in Bihar': "In areas where market access is not easy, cash transfers are not going to be very effective."[968]

The point being that cash transfer programmes alone cannot work. The government needs to work towards delivering public goods. As Devesh Kapur writes in 'The Shift to Cash Transfers: Running Better but on the Wrong Road?', if people use the money they get through cash transfers to buy goods and services from the open market, "state actions in improving market infrastructure, be it access to roads or rural supply chains" would help poor buyers get access to more competitive markets and, in the process, better value for their money.[969]

To put it in simple English, if the government is giving people cash to buy a product, then that product should be available in and around where the people live.

Other than access to a market, there is another important issue that needs to be discussed here. When the government decides to resort to cash transfers, what does it need to be able to do? It needs to identify the beneficiaries and transfer money to them. In turn, beneficiaries should be able to withdraw the money and spend it.

As mentioned earlier, under the Jan Dhan Yojana, the government has managed to get people to open bank accounts at a very fast pace. Despite this, the penetration of the basic savings account in most states remains low. As per the Economic Survey of 2015-2016, it is at 46 per cent across the nation as a whole. Only in two states, namely, Madhya Pradesh and Chhattisgarh, is the penetration greater than 75 per cent. As the Survey states: "Comparing the reach of Jan Dhan with that of *Aadhaar* suggests that the unbanked are more likely to constrain the spread [of cash transfers] than the unidentified."

Just transferring money into the accounts of people is not good enough. In rural areas, there is the problem of last-mile connectivity. It's not possible for banks to have a branch in every village. Hence, they operate through banking correspondents (BCs) who take care of the last mile. They go to every village, and beneficiaries can withdraw the money which has been deposited into their accounts.

The problem is that India doesn't have as many BCs as are needed to solve the problem of the last mile. As the Economic Survey points out: "It is important to benchmark India's preparedness against a country where last-mile financial inclusion is considered good—like Kenya. The Kenyan BC-to-population ratio is 1:172. By contrast, India's average is 1:6,630, which is less than 3 per cent of the Kenyan level. Kenya is more sparsely populated than India, so perhaps India needs fewer BCs. Yet… the spatial density of BCs in India is 17 per cent of the Kenyan level."

Hence, India currently has one banking correspondent per 6,630 individuals. If cash transfer programmes are to take off, this number needs to go up in the days to come. The other option is for the country to use mobile payment technology more aggressively, given that the penetration of mobile phones is higher than that of bank accounts. Only in two states, namely, Bihar and Assam, is the penetration less than 60 per cent, where it is at 54 per cent and 56 per cent, respectively. Furthermore, there are 1.4 million (14 lakh) agents or service posts that service nearly 101 crore mobile customers across India. This works out to a ratio of 1:720, which is significantly better than the ratio of banking correspondents to the total number of citizens.[970]

Of course, any successful initiative in the mobile payments space would involve Big Government having to cooperate with the private sector.

The larger point here is that, despite cash transfers being a superior form of delivering value to its citizens, large parts of the country currently do not have the necessary infrastructure in place. In fact, in a letter written by the government of Odisha to the Ministry of Consumer Affairs, Food and Public Distribution, it was pointed out that, for more than 50 per cent of the state's population, the nearest bank was 10-15 kilometres away.[971]

Only 38.4 per cent of the country's 1.1 lakh bank branches are in

rural areas. The penetration of post offices in rural areas is a lot better. Of the 1.5 lakh post offices in the country, a majority of them are in rural areas. A post office serves, on an average, an area of 21.2 square kilometres and a population of 7,175 people. Furthermore, those against cash transfers say that the state of mobile connectivity across the country isn't very reliable to be able to move on to mobile payments.[972]

In fact, as per the Economic Survey of 2015-2016, the urban parts of states like Chhattisgarh and Madhya Pradesh show a preparedness score of about 70 per cent when it comes to moving to a cash transfer system (or what the government calls a direct benefit transfer). In comparison, other states, like Bihar and Maharashtra, show a preparedness score of around 25 per cent. In rural India, the average preparedness score is around 3 per cent, with the maximum being 5 per cent in the state of Haryana.[973]

What this tells us is that the cash transfer system will have to be introduced gradually across the country, starting with the urban areas in states which are ready for it. This might eventually turn out to be the right thing to do, given that a slow launch would give the government adequate time and experience to correct its mistakes as it goes along.

Meanwhile, what can the government do in order to benefit from the technology infrastructure that is already in place? The Economic Survey talks about the weirdly named BAPU (Biometrically Authenticated Physical Uptake). As the Survey points out: "Beneficiaries verify their identities through scanning their thumbprint on a POS [i.e., point of sale] machine while buying the subsidised product—say, kerosene, at the PDS shop. This is being successfully attempted [in the] Krishna district in Andhra Pradesh, with significant leakage reductions."

The preparation of states for BAPU is much more than for a total cash transfer system. The average preparedness is low, at 12 per cent. But, in some states, like Andhra Pradesh (96 per cent), Chhattisgarh (42 per cent) and Madhya Pradesh (27 per cent), with some push, the states could be well prepared for BAPU in the future.[974] This goes with the idea that, if cash transfers are difficult to implement, then it makes sense to do the next best thing, i.e., to ensure that the leakage in the distribution of subsidised goods comes down.[975]

Furthermore, in an ideal world, a successful cash transfer programme would mean the end of the procurement, transportation and distribution of subsidised goods. So, in the Indian context, this would mean that the state could stop acquiring the massive amount of rice and wheat that it does from farmers directly through the Food Corporation of India and other state procurement agencies.

This is something that hasn't been discussed at all when it comes to the impacts of the cash transfer system. Would politicians be ready for something like this? What would be the impact on food inflation? Does the open market for rice and wheat work well enough? What would happen to the five lakh fair price shops across the length and breadth of the country? Would the government shut down the Food Corporation of India, or would it scale down its operations? Or would the government continue to buy rice and wheat and then sell it in the open market? What about the buffer stock of rice and wheat? There are way too many questions that need to be answered in this case and which, I guess, are beyond the scope of this book.

One thing that I can say for sure is that I haven't heard economists who recommend the cash transfer system discussing these very important questions. While India is nowhere near a successful cash transfer system (in fact, we have barely started), it is surprising to see that nobody is really discussing these pertinent issues.

It also needs to be mentioned here that a cash transfer system waiting for the banking infrastructure to catch up is not the best way of going about things. Consider the fact that, in Colombia, given the reliance of cash transfers on the banking system, the programme was restricted to areas which had the necessary banking infrastructure.[976]

Brazil got around this problem by setting up special delivery mechanisms in areas which had limited infrastructure. People living in remote areas of the country without access to a bank can collect payments at other service points, which include post offices as well.

In the end, all this will not solve the basic problem with India as it has evolved. Typically, in low-income countries, more resources are spent on public goods than social protection (which is what subsidies basically are). It is only after basic public services, like roads, primary education, sanitation, drinking water, drainage systems, etc., are in place that countries turn towards an "ambitious expansion of the welfare state".[977] As Indira Rajaraman has pointed out, the

"entitlement state in Europe came well after governments had delivered on their core role as providers of public goods".[978]

The question is: Can a welfare state be built on a weak foundation of public goods?[979] From the evidence that we have seen in this book, the answer is no. The larger point being that the Indian government is present in many areas where we do not need it but absent in those areas where we do really need it.

Also, it needs to be pointed out here that politicians love subsidies because it gives them more visibility. Trying to build public goods or services is a long-drawn affair which might go unnoticed by the electorate.[980] But if a leader decides to waive bank loans to farmers, the impact of that is instantaneous. This has become especially important over the past few decades, with the rise of multi-party democracy in India.

****

Let's now talk about black money. As mentioned in Chapter 9, the Income Declaration Scheme (IDS) for declaring domestic black money was open between June and September 2016.

The scheme which ended on September 30, 2016 led to the declaration of Rs. 65,250 crore of black money.

The declarations will be taxed at an effective rate of 45 per cent (30 per cent income tax, 7.5 per cent surcharge and 7.5 per cent penalty), and hence, are likely to net the government Rs. 29,363 crore. Half of this amount would have to be paid by March 31, 2017. The remaining amount has to be paid by September 30, 2017.

The IDS was declared to be a huge success. The government press release announcing the black money declarations said that there had been "a tremendous response from the general public, especially in the last two months".

The media, as usual, went on an overdrive, highlighting the success of the scheme. One of the comparisons that have been made is with the Voluntary Disclosure of Income Scheme (VDIS) of 1997, the last black money declaration scheme offered by the government.

The October 2, 2016, Mumbai edition of *The Times of India* ran a graphic around this on its front-page. This graphic essentially said that

the amount collected under the Income Declaration Scheme of 2016 has been 3 times that under the VDIS of 1997. The logic for this is very straightforward. The total amount of black money declared under the 1997 VDIS was around Rs. 33,000 crore. The tax collected on this had amounted to around Rs. 10,000 crore. The tax which the government expects to collect under the IDS is nearly three times, at Rs. 29,363 crore.

An editorial in *The Economic Times* stated: "This is three times as much as the revenue garnered from the amnesty scheme of 1997."[981]

Human beings have a habit of looking at absolute values and ignoring the denominator. Economists refer to this tendency as *the denominator neglect*.

The denominator neglect has been on full show in the case of the IDS. The denominator which the media did not take into account was the size of the Indian economy, which has grown significantly larger in the past two decades.

The nominal GDP at current prices, a measure of the size of the economy, in 1996-1997 (the financial year before the VDIS 1997 scheme) was Rs. 13.02 lakh crore. The total tax collected by the government under VDIS 1997 amounted to around Rs. 10,000 crore. This works out to 0.77 per cent of the GDP.

The nominal GDP at current prices in 2015-2016 (the financial year before the Income Declaration Scheme of 2016) was Rs. 135.76 lakh crore. This is 10.4 times the GDP in 1996-1997. Hence, the size of the economy is 10.4 times larger, though the tax collected has grown only three times.

The tax which the government expects to collect from the Income Declaration Scheme of 2016 is Rs. 29,363 crore. This amounts to 0.22 per cent of the 2015-2016 GDP.

This is significantly lower than the tax collected under the VDIS of 1997. The media obviously did not take the size of the Indian economy into account before going to town toasting the success of the scheme.

One reason for lower collections under the 2016 scheme lies in the fact that the rate of tax to be paid is 45 per cent. Under the VDIS of 1997, it was 35 per cent for corporates and 30 per cent for

individuals. Of course, more people are likely to declare black money at a lower rate of tax. But, even after taking this into account, the difference between 0.77 per cent of the GDP and 0.22 per cent of the GDP is fairly significant.

In fact, if the idea were to ignore the size of the Indian economy, then the media could have come up with an even better result. Instead of taking the VDIS of 1997 and saying that the tax collected under the Income Declaration Scheme of 2016 would be three times, it could have taken the Voluntary Disclosure Scheme of 1975.

The total black money disclosed under this scheme was Rs. 738 crore and the total tax collected had stood at Rs. 241 crore.[982] The total tax expected to be collected under the Income Declaration Scheme of 2016 is Rs. 29,363 crore, which is 122 times Rs. 241 crore.

The point being that even though the government has managed to collect some reasonable amount of tax under the Income Declaration Scheme of 2016, it is nowhere as significant as it has been made out to be.

Furthermore, the total number of declarants of black money in 2016 was 64,275. In fact, the total number of declarants of black money in 1997 was 4.7 lakh.[983]

Also, an extremely minuscule proportion of black money in the country has been declared under the IDS. This becomes clear from the number of declarants being less than 65,000 and the average declaration being around Rs. 1 crore. One estimate made by the economist Arun Kumar suggests that “barely 0.2-0.3 per cent of the black wealth has been declared in the 2016 scheme”.[984]

In fact, the collections of the scheme picked up only in September 2016. It was reported that by mid-August 2016, declarations worth just Rs. 4,000 crore had been made.[985] After this, a spate of income tax raids was carried out to instil fear into those who had black money and to get them to declare it. And that seems to have worked. This leads to the question as to why this can’t be done in the normal scheme of things.

In fact, an early October newsreport in the *Business Standard* pointed out that only 15 per cent of the black money declarants came out on their own. The Income Tax Department had conducted 200 surveys across the country and sent letters to around 7 lakh possible

evaders, asking them to declare their black money under the IDS.[986] This method of identifying tax defaulters needs to be continued with in the days to come.

Several reasons have been offered for why the tax collections under the scheme were not as high as they had been in the past. One is that the tax rate of 45 per cent is way too high in an era when taking money out of the country isn't exactly difficult. The second is that, despite repeated assurances from the government, people who have black money were sceptical as to whether their confidentiality would be maintained.

In fact, in September 2016, the government gave the assurance that payments made under the Income Declaration Scheme would not get reflected in Form 26 AS, the regulatory filing form which contains all the details of the tax paid by the taxpayer during the course of the year.

****

In a late-evening announcement on November 8, 2016, Prime Minister Narendra Modi said that Rs. 500 and Rs. 1,000 notes were being demonetised. Come midnight, and they would be useless pieces of paper.

The demonetised notes could be deposited in "bank or post office accounts from 10th November till [the] close of banking hours on 30th December 2016 without any limit".[987] The notes being deposited would be credited into the depositor's account.

Initially, up to Rs. 4,000 of demonetised notes could be exchanged for notes of smaller denominations, which continued to be legal tender, as well as new notes of Rs. 500 and Rs. 2,000. This limit was briefly increased to Rs. 4,500 and then brought down to Rs. 2,000. Finally, no exchange was allowed. Demonetised notes could only be deposited into bank accounts or post office accounts.

As of November 11, 2016, the total currency in circulation amounted to Rs. 17.87 lakh crore.[988] Three days earlier, on November 8, 2016, 1,716.5 crore Rs. 500 notes and 685.8 crore Rs. 1,000 notes had been in circulation.[989] Ideally, the currency in circulation data for November 8, 2016 should have been used, but given that this is not available, we will work with the currency in circulation data as of November 11, 2016.

The value of the high-denomination notes of Rs. 500 and Rs. 1,000 amounted to Rs. 15.44 lakh crore. The Rs. 500 notes amounted to Rs. 8.58 lakh crore, whereas the Rs. 1,000 notes amounted to Rs. 6.86 lakh crore. Hence, notes forming 86.4 per cent of the total currency by value had been demonetised.

Basically, a major chunk of the currency in the financial system was rendered useless overnight. Why would any sensible government do something like that? As per the Modi government, the idea behind this move was two-fold. As the press release explaining the decision pointed out: "With a view to curbing [the] financing of terrorism through the proceeds of Fake Indian Currency Notes (FICN) and [the] use of such funds for subversive activities such as espionage, smuggling of arms, drugs and other contraband into India, and for eliminating Black Money, which casts a long shadow of parallel economy on our real economy, it has been decided to cancel the legal tender character of the High Denomination bank notes of Rs. 500 and Rs. 1,000 denominations issued by [the] RBI till now."

With the old Rs. 500 and Rs. 1,000 notes being demonetised, all the fake high-denomination currency was suddenly rendered useless. Also, the hope was that, with the demonetisation of high-denomination notes, those holding black money in the form of cash would end up with useless pieces of paper. This would lead to the total amount of black money in the system coming down. The idea was to attack the stock of black money that people had in the form of cash.

This was a classic Big Government move: the government trying to come up with ambitious solutions without considering its own implementation capabilities. Before I explain this, I would like to take a slight detour and narrate a story from the Second World War.

I first came across this story while writing what would become the first chapter of the first volume of the *Easy Money* trilogy, which I had written previously. This is a story about cigarettes and how they were used as money in the prisoner-of-war camps during the Second World War. (These camps had cropped up all over Europe during the War.)

The prisoners used to receive standard food parcels from the Red Cross during the war. These parcels included biscuits, butter, cigarettes, canned beef, chocolate, jam, milk, sugar, etc.[990]

As soon as the rations arrived, prisoners used to start exchanging

them. One of the earliest transactions used to be that of non-smokers exchanging their cigarettes for chocolates that the smokers had got. Sikhs who had been fighting for the British Army used to exchange their allocation of beef for other goods, like butter, jam and margarine.

But, gradually, cigarettes went way beyond the status of a normal commodity and became the standardised medium of exchange. A prisoner of war even recalled exchanges like “cheese for seven cigarettes” happening in the camps. He also recalled an individual who sold coffee, tea and hot chocolate at the rate of two cigarettes a cup. This individual eventually scaled up his business, but ultimately failed, incurring a loss of a few hundred cigarettes.[991]

So, what made cigarettes a viable form of money during and after the Second World War? A cigarette has some of the qualities of ‘good’ money. It is reasonably durable. It can easily be carried (in pockets, I presume). It is easily divisible, from crates to packets, to a single cigarette. And inside a prisoner-of-war camp, it was difficult to counterfeit.

There were always some people who ‘shook out’ a bit of tobacco from cigarettes they had got until they had enough tobacco to roll up a new one, though it would be immediately obvious to the other party that the cigarette was a hand-rolled one and not the real thing that everybody was accepting as money.

But these were minor disadvantages in comparison to what happened when the weekly Red Cross parcels did not arrive. At other times, the stress of heavy air raids near the camps made people smoke away their money, i.e., cigarettes.[992]

In such situations, there was not enough ‘money’ going around in the prison market, which led to a situation wherein prices fell. Since people did not have cigarettes to buy goods, those who were hoarding food, toiletries, and so on had to cut prices in the hope that they could make a sale.

At other times, many prisoners received parcels from home full of cigarettes. This meant that the number of cigarettes in the camp would shoot up. Suddenly, the money supply was up, and with more money chasing the same number of goods, prices would go up.[993]

Dear reader, you must be wondering why I am bringing up this story seven decades later. What is the link with the demonetisation issue?

The point of this story is that the total amount of paper money or currency going around in any economy, which is a part of what economists call money supply, has an impact on the way the economy behaves. Typically, we tend to hear stories of how governments and central banks stuff the financial system with paper money by printing it, and that leads to high inflation.

A good recent example is that of Zimbabwe. Between August 2007 and June 2008, the money supply in Zimbabwe went up 20 million times, sending inflation through the roof. In early 2008, the consumer price inflation was said to be at 2 million percent. By the end of the year, it had shot up to around 230 million percent.[994]

What happened in Zimbabwe was that the supply of paper money went up at a dramatic pace, but the supply of goods and services that money could buy continued to remain the same. As excess money chased the same amount of goods and services, it led to a rise in prices, or inflation. Paper money rapidly lost its value. Hence, an excess of paper money in the financial system is bad for the economy.

This is something that is well known and has been spoken about quite a lot over the years. What has not been spoken about enough is the opposite scenario, wherein the money supply suddenly gets sucked out of the financial system and there isn't enough money going around as there had been in the past.

The example of cigarettes as money during the Second World War is a good example of what happens when there isn't enough money going around. When prisoners smoked away their cigarettes because of the excess cold or when the Red Cross rations did not arrive, there was suddenly a shortage of cigarettes (or money) going around.

And when there was a shortage of cigarettes going around, the transactions happening within the camp collapsed. The buying and selling of things came to a standstill. With no cigarettes going around, how could prospective buyers buy things inside a camp? This meant that the sellers had to cut prices in order to get those who still had cigarettes to buy goods.

The simple point here is that, for a market to operate, there needs

to be enough money going around. In modern economies which tend to use a high proportion of cash to carry out transactions, like India does, this means that there needs to be enough paper money, or currency notes, going around.

Paper money is primarily a token deemed to have a certain value by the government (or the central bank) which everyone accepts and is used to carry out transactions in the everyday economy. Without enough paper money in the economy, people can't carry out transactions, and the economy comes to a standstill. This is precisely what has happened in the aftermath of the Modi government's decision to demonetise Rs. 500 and Rs. 1,000 notes. Suddenly, there was too little currency going around.

The Modi government's move to render more than 86 per cent of the currency useless basically brought transactions across almost all markets to a grinding halt. Mobile phone sales have collapsed. People aren't buying two-wheelers as they did before demonetisation. The farming economy has slowed down tremendously. Daily-wage workers, like plumbers and electricians, are not getting enough work.

As I write this, a few days into 2017, just under two months after the demonetisation announcement was made, things don't look good. It is safe to say that the Indian economy will be in shaky territory well into 2017.

As we saw earlier in this section, Rs. 15.44 lakh crore worth of currency was demonetised. By December 19, 2016, the latest data available at the time of writing this (in early January 2017), only a part of this demonetised currency had been replaced. Data from the RBI suggests that close to Rs. 5.93 lakh crore had been issued to the public. This basically means that around 38.4 per cent of the demonetised currency had been replaced close to six weeks after demonetisation. People had withdrawn this money from their bank accounts as well as ATMs.

Given that, a little under two-fifths of the demonetised currency which had been in circulation was replaced by December 19, 2016. This best explains why transactions across markets in the country have collapsed. Also, initially, only Rs. 2,000 notes were released. This meant that the next highest denomination note was Rs. 100. Hence, this created the problem of obtaining change during transactions in the economy, pretty much rendering the Rs. 2,000 note useless.

Furthermore, between November 10, when banks started accepting demonetised notes, and December 10, 2016, Rs. 12.44 lakh crore of demonetised currency had been deposited into banks.

This meant that, in a period of one month, close to 81 per cent of the demonetised currency (Rs. 12.44 lakh crore divided by Rs. 15.44 lakh crore) had already made it back to the banks. Between then and January 3, 2017, the RBI did not update the data on the total amount of demonetised currency that made it back to the banks. But given the past pace, it is safe to say that more or less the entire demonetised currency must have come back to the banks.

The original idea of demonetising Rs. 500 and Rs. 1,000 notes was to destroy black money. The hope was that those who had held on to black money in the form of cash would not deposit it with banks, given that it would generate an audit trail, and the total amount of black money held in the form of cash that did not make it back to the banks would basically be the black money that would be destroyed. But that doesn't seem to have happened.

The lesser the black money destroyed in the form of cash, the more relevant the question as to whether the demonetisation was really required. In fact, it will raise more questions. Were the people who had black money in the form of cash able to exchange it for new notes? There are stories going around on how merchants and businessmen have forced employees to deposit black money into their bank accounts. In one particular story that I came across, I was told that a merchant had given Rs. 50,000 to each of his employees and asked them go and deposit it into their accounts. He would then deduct that money from their salaries in the months to come. This way, his black money would become white.

There are other stories of agents helping to convert demonetised notes into dollars for a cut. There are other agents helping people convert black money into white by getting it deposited into Jan Dhan Yojana accounts. There are even stories of bank managers themselves helping convert black money into white by providing new notes. Many of them have been caught in the process as well.

How close we eventually got to Rs. 15.44 lakh crore will become clear only once the RBI and the government choose to release the data. But by looking at the data that is available, it is safe to say that as far as destroying black money is concerned, the demonetisation

move has failed.

****

It is important to point out here that currency is not the only form of money. Over and above currency, deposits held in savings bank accounts are also money. One can use debit cards to spend this money. Over and above this, the fixed deposits held in banks are also money. While they are not immediately available to depositors when it comes to spending, they can be broken and the money thus got can be spent.

Furthermore, people can also spend money using credit cards, e-wallets, and so on. The point being that paper money is not the only form of money that can be accessed and spent. But, in a country like India, where a bulk of all transactions take place in cash, paper money is very important to keep transactions going and markets operating.

Assurances have been made about banks having enough new notes, both by politicians as well as the RBI. But that is really not true. The reason for this is straightforward. There aren't enough new Rs. 500 notes going around simply because they haven't been printed. Some basic maths tells us that it will take at least another five to six months to print enough new Rs. 500 notes and get them out there.

A pertinent question is: Why has the rate of currency replacement been so slow? And this is where Big Government comes in. A big decision to demonetise high-denomination notes was taken. But the government did not take into account its capability (or should I say incapability?) to implement the decision.

During the time that the demonetised currency could be returned to the banks, a total of Rs. 2,000 per day could be withdrawn from ATMs. From January 1, 2017, this has been increased to Rs. 4,500. When it comes to bank accounts, withdrawal through withdrawal slip or cheque is subject to a weekly limit of Rs. 24,000. This includes withdrawals from ATMs as well.

Why has this limit been put in place? Why have citizens not been allowed to withdraw their own money? The simple explanation for this lies in the fact that the government hasn't printed enough new notes to replace the old ones. There is only this much printing capacity that the government mints have. This is a classic example of Big Government living up to its name. At a higher level, a decision is

taken. At the lower level, there simply isn't enough capacity to implement it.

Also, post-January 1, 2017, if the withdrawal limits had been lifted, there would also have been the danger of people withdrawing as much money as they could have from banks and, in the process, causing a bank run.

Getting back to the issue at hand. In total, around 1,716.5 crore Rs. 500 notes had become useless due to the demonetisation. Media reports suggest that the capacity of the government and the RBI is to print a total of around 300 crore notes per month. It is interesting to see how they have arrived at this number. A reading of the RBI Annual Report for 2015-2016 tells us that, in the last three years, the currency note printing presses have supplied around 2,200 crore notes a year, on an average.

The total annual printing capacity of the currency note printing presses owned by the government is 2,400 crore.[995] This is achieved by running two shifts. Adding a third shift can increase production, by 50 per cent, to 3,600 crore notes per year. This essentially means a production of 300 crore notes per month.

What if we work with the supply number of 2,200 notes per year? A third shift would lead to a jump to 3,300 crore notes per year. This would mean a production of 275 crore notes per month.

To get back to the point: Around 1,716.5 crore Rs. 500 notes need to be exchanged. At 300 crore notes per month, it will take around 5.7 months to print the new Rs. 500 notes to replace the old ones. At 275 crore per month, it will take around 6.2 months. So, just to replace the Rs. 500 notes can take a period of at least five to six months. Given this, the currency shortage in the Indian economy is likely to continue till at least May 2017.

In this scenario, transactions across markets will continue to remain slow. This includes the textile markets of Ludhiana and Tirupur, the paper mills of Uttaranchal and the shoe market of Agra. Agricultural markets across the country have also been on a slow mode.

Another option that needs to be considered here is that some people will go cashless in the coming months. The more the number of

people going cashless, the less the need for new notes. But then one needs to consider the fact that a bulk of consumer transactions in India (as high as 98 per cent, as we shall see) still happens in cash.

Taking all these factors into account, it is safe to say that, given the current state of things and level of information available, it will take around five to six months for enough new notes to find their way into the financial system to replace the existing ones. Hence, it will take at least half a year for the financial system to get back to a similar purchasing power level as it had before November 9, 2016.

This basically tells us that the demonetisation move wasn't thought through well enough, irrespective of what the establishment tells us now about wanting to maintain secrecy. It also tells us that, time and time again, Big Government just doesn't seem to realise that it has very limited implementation capabilities.

Furthermore, you don't pull out more than 86 per cent of the currency from the market overnight without having a significant portion of the new currency ready. It's time to be prepared for lower sales figures for all kinds of consumer products. And it's time to be prepared for a lower GDP growth number in the second half of 2016-2017.

Also, it remains to be seen whether this demonetisation turns out to be a game-changer in the long run, as the Modi government has been claiming. But the early evidence isn't really encouraging. In fact, with the zeal and focus that Modi has shown towards the black money issue, cleaning up the electoral financing system in India should be his next big aim. But before we come to that, we need to look at something else.

****

A major problem because of the lack of cash has been a slowdown in the construction and real estate sectors. This slowdown has been because of two reasons. One is because the sector largely uses cash to pay its workers, and there isn't enough cash going around to pay them. Furthermore, enquiries in the real estate sector have dropped big time. This has forced construction workers to go back to their villages.

India's natural comparative advantage is low-skilled labour. Construction and real estate are major employers of this labour. If

construction and real estate are not employing people, then clearly there is trouble ahead.

As mentioned earlier, the National Manufacturing Policy of 2011 estimated that the number of Small and Medium Enterprises (SMEs) in India had stood at over 26 million (2.6 crore) units. They employed around 59 million (5.9 crore) people. This means that any SME, on an average, employed 2.27 individuals. The size of an average Indian SME is small. These firms basically employ the owner and one more person, on an average. Interestingly, nearly two-thirds of these firms are own-account enterprises without any hired workers.

A bulk of these small firms operate under the radar and are not a part of India's formal tax system. Also, they operate largely in cash. Despite their smallness, almost 92 per cent of the workforce is employed in the informal sector.[996] Given that these firms operate largely in cash, it has brought their current operations almost to a standstill.

The thinking is that, with demonetisation, these firms will now come under the formal system. And that is a good thing. The trouble is that many of these firms will simply be unviable if they come under the formal economy, with tax being only one of the things that they will have to deal with. As mentioned earlier, the National Manufacturing Policy of 2011 estimates that, on an average, a manufacturing unit needs to comply with nearly 70 laws and regulations. Given this, these firms may simply choose to shut down because it may be totally unviable for them to operate in the formal sector. Furthermore, the lack of cash in the system is likely to hit the smallest of the small entrepreneurs the most.

As mentioned earlier, two-thirds of the small firms are own-account enterprises, without any hired workers. Also, these individuals are not self-employed, by choice, but are self-employed because they have no other option.

Furthermore, these self-employed individuals aren't exactly making a killing. As the *Report on Fifth Annual Employment-Unemployment Survey (2015-16)* points out: "At the All-India level, a majority 67.5 per cent of the self-employed workers had average monthly earnings [of] up to Rs. 7,500." This basically means an income of up to Rs. 90,000 per year. This clearly tells us that the staying power of these very small entrepreneurs, who operate on their own, is not huge.

Given that they are not making much money, their ability to survive is limited if they have to shut down even briefly. If they do shut down in the aftermath of demonetisation, they will hit the job market soon to keep making a living. And that can't be a good thing for India's already burgeoning demographic dividend.

In fact, income tax needs to be paid only if the taxable income for the year is greater than Rs. 2.5 lakh, which is clearly not the case with those making up to Rs. 7,500 per month. Furthermore, only 4 per cent of the self-employed earn an income of greater than Rs. 20,000 per month. Even at Rs. 20,000 per month, the annual income comes to only Rs. 2.4 lakh, which is still below the taxable level.

The point being that less than 4 per cent of the self-employed fall in the Income Tax category. Hence, even though they are operating in the informal market, at least they aren't breaking any income tax laws. I make this point to essentially dispel the argument that everyone in the informal sector is operating in the black economy. That is clearly not the case. They just don't earn enough to be paying income tax.

Having said that, there are firms which do not pay income tax even though they should. Nevertheless, the pay-outs that they make to their employees do not remain a part of the black economy. When employees of such firms spend money, they pay indirect tax, which lands up in the government kitty. Also, the money they spend is an income for formal businesses, and some of them do pay tax on it.

The point being that even though many businesses which operate under the radar generate black money, those who get paid by these businesses do not have any black money. Also, when they spend their money, they contribute to the formal economy which pays taxes.

****

Demonetisation aims at destroying the stock of black money. It does not do anything about stopping its further generation. For that to happen, the Modi government will have to hit where it will perhaps hurt the most.

An analysis carried out by the National Election Watch and the Association for Democratic Reforms reveals that, during the period 2004-2005 and 2011-2012, the total income of the national political parties was Rs. 4,899.5 crore. (The six national parties are the

Congress, BJP, NCP, BSP, CPI and CPM.)

The Congress Party declared the highest income, of Rs. 2,365 crore. This was followed by the Bhartiya Janata Party, which declared an income of Rs. 1,304 crore.

Between 2004-2005 and 2011-2012, there were two Lok Sabha elections (in 2004 and 2009) and multiple state assembly elections. It doesn't take rocket science to come to the conclusion that the respective incomes declared by the political parties were clearly not enough to fight so many elections.

Within 90 days of completion of the General Elections, political parties are required to submit their election expenditure to the Election Commission of India. The National Election Watch and the Association for Democratic Reforms have analysed this expenditure for the last Lok Sabha election, and their analysis makes for very interesting reading. This expenditure statement contains the "details of the total amount received as funds in the form of cash, cheques and demand drafts, and the total amount spent under various heads".

The total amount of funds collected by the national political parties for the 2014 Lok Sabha election was Rs. 1,158.6 crore. This was 35.5 per cent higher than the funds collected for the 2009 Lok Sabha elections. The total declared expenditure of the national political parties was Rs. 1,308.8 crore, up by 49.4 per cent from 2009.

Now, compare this to an estimate made by the Centre for Media Studies in March 2014. It estimated that around Rs. 30,000 crore would be spent during the 16th Lok Sabha elections which were to happen in April and May 2014. Of this amount, the central government would spend around Rs. 7,000-8,000 crore to conduct the elections. The remaining amount of around Rs. 22,000-23,000 crore would be spent by the candidates fighting the elections.

Of course, national political parties are not the only parties fighting elections. Nevertheless, the difference between the officially declared expenditure and the 'real' expenditure to fight elections is huge. Where does this money come from?

As Sandip Sukhtankar and Milan Vaishnav write in the research paper titled 'Corruption in India: Bridging Research Evidence and Policy Options': "On the expenditure side, candidates face strict limits on spending once elections have been announced, but election

authorities struggle to properly verify their reported expenditure, since a substantial portion typically occurs 'in the black'."[997] Hence, black money finances political parties and, in the process, elections in India.

The laws are also structured to help this. As Sukhtankar and Vaishnav point out: "For instance, corporations and parties are only legally required to publicly disclose political contributions in excess of Rs. 20,000. This rule allows contributors to package unlimited political contributions just below this threshold value completely free of disclosure."[998] And this is something that political parties make blatant use of.

Before we dive deep into this, it is important to go back to demonetisation and how the official communication around it evolved after it was first declared on November 8, 2016.

In the November 27, 2016 *Mann ki Baat* address to the nation, Prime Minister Narendra Modi talked about India moving towards a cashless society. As he said: "The great task that the country wants to accomplish today is the realisation of our dream of a 'Cashless Society'. It is true that a hundred percent cashless society is not possible. But why should India not make a beginning in creating a 'less-cash society'? Once we embark on our journey to create a 'less-cash society', the goal of 'cashless society' will not remain very far."

A very noble thought indeed, the practical part of implementing it notwithstanding. I say this because smart phone penetration is low, internet connectivity and speeds outside the big cities are patchy and so is the availability of electricity. These are three things required for moving towards digital payments, along with a bank account and the ability to read of course.

The interesting thing is that the mention of this dream of India moving towards a cashless society wasn't made in Modi's November 8, 2016 address to the nation.

Neither was it a part of the Ministry of Finance press release that accompanied the decision. The primary goal of demonetisation was to tackle fake currency notes and black money. Of course, it can be said that the dream towards a cashless society goes hand in hand with the dream of eliminating black money. So, to that extent, they are connected. Nevertheless, with the way the entire issue of demonetisation has been handled, it is safe to say that this was not

something that the government had thought about originally.

It is worth asking how feasible this dream is. A PwC report titled 'Disrupting cash: Accelerating electronic payments in India' points out that 98 per cent by volume of consumer transactions in India are still in cash. The number is 96 per cent in the case of Mexico, 94 per cent in the case of South Africa, 90 per cent in the case of China, and 86 per cent in the case of Japan. While this figure can definitely be brought down, there is no way India is moving towards becoming a cashless society any time soon.

Also, what is Modi's big reason for India moving towards cashless and digital payments? As he said on the same *Mann Ki Baat* programme: "You have to voluntarily lend your leadership to this great campaign, this *Maha Abhiyan*, to create a 'cashless society', to eradicate corruption from our country, to abolish the scourge of black money…"

The point Modi was making is that India is a corrupt country because we deal in cash. But is that really true? Take the comparison between India and Japan. Japan has a cash-to-GDP ratio of 19 per cent. India's is at 12 per cent. When it comes to corruption, Japan is the 18th least corrupt country in the world. India comes in at the 76th position.[999]

Or let's take the case of Argentina. The cash-to-GDP ratio of the country is at 2.1 per cent. In comparison, the cash-to-GDP ratio of New Zealand and Denmark are at 2.3 per cent and 3.3 per cent, respectively, both higher than that of Argentina. How do things look when it comes to corruption? As per Transparency International's rankings, Argentina is the 107th least corrupt nation in the world. In comparison, New Zealand is the fourth least corrupt country in the world, while Denmark is the least corrupt country in the world.

There are many other such examples. Hence, there is *no clear link between less corruption and going cashless,* as Modi would like us to believe. He is clearly trying to manufacture a face-saver for himself in the aftermath of the demonetisation debacle.[1000]

But given that the Prime Minister wants India to move towards a cashless society, there is one thing that he should do to convince the nation of just how serious he is about the cashless dream. If the nation is expected to go cashless, why are political parties still allowed to

take cash donations? This is something that the Prime Minister and the Bhartiya Janata Party can work towards eliminating.

Given that political parties do not have to publicly disclose donations below Rs. 20,000, large parts of the donations they receive are from unknown sources. As the National Election Watch and the Association for Democratic Reforms point out in a report titled 'Analysis of Income & Expenditure of National Political Parties for FY 2014-2015': "Only 49% of the total donations of the parties came from voluntary contributions above Rs. 20,000." This means that 51 per cent of the donations came from those making donations of Rs. 20,000 or lower. Hence, the donors are virtually unknown.

If Narendra Modi is serious about his fight against black money and moving India towards a cashless society, this needs to stop. If you, I and everybody else are being encouraged to go cashless, why should political parties still be allowed to take donations in cash and not declare their source of funds?

Since the entire demonetisation issue is more about making a political point, the BJP can take a step forward on this front and promote the usage of a Unified Payment Interface for cash donations that are made to a political party. In fact, the BJP should make all donations of less than Rs. 20,000 be made compulsorily through the Unified Payment Interface.

This will work at multiple levels. The BJP will score political points over its rivals and allow Modi to take a high moral ground again. The economy will become more cashless. Furthermore, there will be less infiltration of black money into political parties, given that those making donations of Rs. 20,000 or less can be identified as well.

Also, another important observation that needs to be made here is regarding bringing political parties under the Right to Information (RTI) Act. In an affidavit submitted to the Supreme Court in August 2015, the Modi government said: "If political parties are held to be public authorities under [the] RTI Act, it would hamper their smooth internal working, which is not the objective of the RTI Act and was not envisaged by Parliament. Furthermore, it is apprehended that political rivals might file RTI applications with malicious intentions, adversely affecting their political functioning."[1001]

In fact, the Congress Party has argued along similar lines against the 2013 order of the Central Information Commission to bring the six

national parties under the ambit of the Right to Information Act. In June 2016, it argued before the Commission: "Declaring a political party as [a] public authority under the RTI Act would hamper its smooth internal working, which is not the objective of the RTI Act."[1002] In fact, the argument is exactly the same as the one used by the Modi government to the Supreme Court in August 2015.

In fact, the Congress Party further said that if political parties were brought under the RTI, rivals would maliciously file a large number of RTI applications and adversely impact functioning of the political parties. This parrots the Modi government's stand and is a pretty ridiculous argument, given that if some party decides to do this with the Congress, the Congress can do the same with that political party. Hence, there is already a sense of balance in the system.

If political parties are brought under the ambit of the RTI Act, they will have to function in a much more transparent way in comparison to how they do now. This would mean keeping proper records of where the funds to finance them are coming from.

Furthermore, real estate companies and builders are major financers of political parties, at least at the state level. There is some very good research evidence to suggest that builders do finance politicians before elections. In a paper titled '*Quid Pro Quo*: Builders, Politicians and Election Finance in India', Devesh Kapur and Milan Vaishnav look at the cement consumption of builders to show that builders make payments to politicians.

All construction requires cement. When it comes to cement demand, the real estate sector accounts for a major part of the demand in India. When the construction activity carried out by the real estate sector goes up, the demand for cement increases. If the real estate companies are key financers of politicians, as they are assumed to be, then, just before the elections, they would need money to finance the electoral campaigns of politicians.

If the real estate companies do pay the politicians, it would mean that they would have lesser money to carry out their own activities. This would mean a slowdown in their construction activity. And a slowdown in construction activity should lead to a fall in cement consumption.

Hence, cement consumption can be tracked to figure out whether real estate companies are actually financing politicians. Kapur and

Vaishnav looked at elections in seventeen Indian states between 1995 and 2010. They found a "contraction in cement consumption (representing a 12 to 15 per cent decline) during the month of state assembly elections". What this clearly tells us is that real estate companies do finance state-level politicians, as is indeed commonly inferred.

Interestingly, the authors even offer some anecdotal evidence. A builder constructing a hotel in Mumbai was told by the government that it would issue the permits required if there was some *quid pro quo*. And what was the *quid pro quo*? It wasn't cash, but a stake of five per cent in the hotel in the name of a firm connected to a local politician.[1003]

In fact, an October 2012 newsreport in the *Tehelka* magazine stated that, in Mumbai, "almost every MLA and MP, both past and present, cutting across political lines, owns at least one real estate project".[1004]

Hence, if political parties are brought under the ambit of the RTI, the nexus between politicians and builders would come under proper scrutiny. This is something that no political party can afford. Given this, it is very important to bring political parties under the RTI. Only then will a serious crackdown on black money happen.

There are a few other steps that the Modi government can take in order to seriously tackle black money.

1) Any purchase of gold from now on should be mandatorily made against a PAN card. Currently, a PAN card is required only when gold worth greater than Rs. 2 lakh is bought. In fact, this allows jewellers to split large sales of gold into smaller bills of less than Rs. 2 lakh and spread it out. This is how many jewellers operated on the night of November 8, 2016, when demonetisation was first announced. In the process, they helped convert a significant amount of demonetised money into gold.

2) The nexus between politicians and real estate builders needs to be broken down. There are already newsreports appearing that state governments are in the process of diluting the pro-consumer Real Estate (Regulation & Development) Act (RERA) of 2016. The least that the Modi government can do is to ensure that this does not happen in states where the BJP is in power.

3) Real estate should be brought under the Goods and Services Tax (GST). If real estate is brought under the GST, then if the builders want to claim input tax credit, they must request documentation from all the suppliers and contractors that they work with. This will hopefully start cleaning up the real estate business as more and more builders will have to operate through legitimate means. Once they stop using cash in dealings with their suppliers, their proclivity to ask for cash from their customers will also go down. This will ensure that the generation of black money comes down.

Of course, this would mean that the state governments would have to agree to the change as well. This will be a big attack on Big Government and, given that, is unlikely to happen.

4) Stamp duty rates on real estate transactions need to be slashed. This is one reason why the real estate sector is at the heart of black money. If stamp duties across states are reduced and brought to realistic levels, the tendency of people to under-declare the value of real estate transactions will come down. Hence, the proportion of cash transactions will come down and so will the generation of black money.

5) The Income Tax laws of this country need to see some real simplification. Even the simplest Income Tax form (Sahaj) currently runs into six sections on an Excel sheet. The laws need to be simplified to a level where at least the salaried class should be able to file their own income tax returns without having to work through CAs.

As mentioned earlier, December 30, 2016, was the last day to deposit demonetised money into banks. On December 31, 2016, Prime Minister Narendra Modi addressed the nation. While people were looking for specific answers on demonetisation, what they got instead was a long list of generalities.

Sample this: “Over the last ten to twelve years, 500 and 1000 rupee currency notes were used less for legitimate transactions, and more for a parallel economy.” This is something that the Ministry of Finance press release accompanying the demonetisation decision had also pointed out.

Both Modi and the Ministry of Finance were essentially saying the same thing. High-denomination notes facilitate the black economy. Take the case of a real estate transaction. A home is sold. The buyer and the seller carry out a part of the transaction in cheque and the rest is carried out in cash.

There is no record of the transaction being carried out in cash. Hence, the buyer does not pay stamp duty on that part of the transaction and the seller does not pay any capital gains tax on it. The cash that is paid is in high-denomination notes. Hence, high-denomination notes facilitate a black economy transaction on which taxes are not paid.

Furthermore, individuals keep a part of the black money they have earned in the form of high-denomination notes. Demonetisation was supposed to hurt them by rendering the Rs. 500 and Rs. 1,000 notes useless overnight. That hasn't happened.

The idea that high-denomination notes facilitate the black economy is well accepted internationally. Take the case of the United States. The highest denomination note is $100. In Britain, the highest denomination note is £ 50. Hence, the highest denomination note in the United States is 100 times the lowest denomination note of $1. In Britain, it is 50 times. In India, until demonetisation happened, the highest denomination note was Rs. 1,000, which was 1,000 times in value the lowest denomination note of Re. 1.

Given this, one would have appreciated the decision to demonetise Rs. 500 and Rs. 1,000 notes if a new note of Rs. 2,000 hadn't been issued. If Rs. 500 and Rs. 1,000 notes were facilitating black market transactions, then so will Rs. 2,000 notes, in fact to a larger extent.

As on November 8, 2016, 685.8 crore Rs. 1,000 notes were in circulation. These notes have been replaced by the Rs. 2,000 note. As on November 8, 2016, the RBI had printed and kept around 247 crore Rs. 2,000 notes in its kitty. Since then, it would have printed more. 247 crore Rs. 2,000 notes can replace 494 crore Rs. 1,000 notes. It is safe to say that more than 72 per cent of the Rs. 1,000 notes have already been replaced by Rs. 2,000 notes.

Now, these notes can be used for facilitating black economy transactions, just like the Rs. 1,000 notes earlier were. So, what is the way out of this? Some economic commentators have suggested that, in the time to come, the Rs. 2,000 note should be demonetised as well.

As we have come to know by now, demonetisation is very disruptive.

The best way to go about this is to phase out the Rs. 2,000 notes gradually. This idea has been suggested by the economist Kenneth Rogoff in his new book, *The Curse of Cash,* in a different context. Paper money has a limited shelf life. As Rs. 2,000 notes run through their life-cycle, they need to be replaced by Rs. 500 notes, and not by new Rs. 2,000 notes.

This won't happen overnight and will take time. Meanwhile, the government, unlike this time around, can be ready for the situation, and print enough Rs. 500 notes in advance. It will take four 500-rupee notes to replace a Rs. 2,000 note. Over a period of a few years, the Rs. 2,000 notes can be replaced by Rs. 500 ones. Of course, all this is subject to the condition that the government genuinely wants to attack black money and not just talk about it.

****

What is clear is that if India's demographic dividend has to be cashed in on, Big Government in many areas needs to go. This means that the government needs to look at newer ways of doing things when it comes to educating India's children. It's not just about setting up new schools which have playgrounds attached to them and where teachers complete the syllabus.

The government needs to limit its ambition and get out of banks and companies, where it just can't compete. At the same time, it should concentrate on providing those basic public goods without which any society cannot operate efficiently. These include proper roads, railways, electricity transmission systems, sewage systems, national defence, and so on.

In fact, each of these things can contribute towards the successful implementation of a programme like *Make in India*. At the same time, the government needs to work towards sorting out the mess in India's land markets as well as its labour laws. Only when these two important issues are sorted out will small Indian firms start expanding and want to become big firms, which is something that is currently not happening.

Also, the government needs to make a distinction between paying for goods and services in comparison to producing and distributing them. This would mean moving on to cash transfers in the case of

many subsidies that the government provides to the citizens of this country. This would hurt the incumbents who have been feeding on the system and the current way of doing things. Also, if cash transfers are to become the order of the day, the current system needs to be rapidly improved upon.

Over and above this, the government needs to honestly work towards bringing down the total amount of black money in Indian society. And any successful implementation of this cannot come about unless political parties start by cleaning up their own closets first, the demonetisation notwithstanding.

To cut a long story short, reforms, both political and economic, are needed. The trouble is that in India any sort of reform is looked upon with suspicion. Hence, politicians have always pushed through any sort of reform using stealth, without bothering to explain them to the people of this country.

This fear of reforms also stems from the fact that some stories are stronger than the data suggests. Take the case of the Atal Bihari Vajpayee-led National Democratic Alliance (NDA) losing the 2004 Lok Sabha elections when everyone expected them to win it. One of the *post facto* explanations that came out after Vajpayee's loss was that he pursued economic reforms and then ran the India Shining campaign.

The larger question is whether or not the Modi government believes in the conventional explanation behind why Vajpayee lost. From the way they have abandoned the 'Minimum Government, Maximum Governance' slogan, it is only fair to speculate that they do believe in the conventional explanation behind Vajpayee's loss.

There is also the fact that the process of the second generation of economic reforms, which was expected to be put on a fast track after Modi had won, hasn't really taken off.

Nevertheless, the question remains: Do reforms and economic growth finally lead to votes for the incumbent political party the next time it fights elections? What does research say on this front? In a research paper titled 'Does Good Economics make for Good Politics? Evidence from Indian States', Milan Vaishnav and Reedy Swanson look at 128 state assembly elections across 18 states over a period of the more than three decades between 1980 and 2012. These states account for 93 per cent of India's population.

And what did these researchers find? When they looked at the elections over 32 years, they did not find any correlation between economic growth and electoral performance.

But things get more interesting when the data is divided into three categories. The researchers divided the time period into three decades, namely, the 1980s (1980-1989), the 1990s (1990-1999), and the 2000s (2000-2012). In the 1980s, there was a weak association between economic growth and electoral victories. In the 1990s, there was a negative association between economic growth and electoral wins, i.e., the incumbent government could possibly have lost if it had delivered on economic growth. This, perhaps, explains why Lalu Prasad Yadav did so well in Bihar in the 1990s.[1005]

In the 2000s, the situation changed, and there have been "increasing electoral returns to growth". This means that if a government delivers on economic growth, its chances of winning the next election go up. Vaishnav and Swanson found that a 1 per cent increase in the economic growth rate of a state "is associated with a 7.6 per cent increase in the likelihood of a government being re-elected".[1006]

This is how things stand when we look at state assembly elections. And what about the Lok Sabha elections? In a research paper titled 'Growth and Election Outcomes in a Developing Country', Poonam Gupta and Arvind Panagariya look at the 2009 Lok Sabha elections. The 2009 Lok Sabha elections had been preceded by 8 to 9 per cent per year economic growth.

And what did they find? As they write: "Candidates of the incumbent party do better in high-growth states than those in medium-and low-growth states." In fact, 69 per cent or more of the candidates of the incumbent parties won elections in high-growth states. In low-growth states, this falls to 50 per cent.

The point being that, while economic growth may not have led to electoral wins earlier, things have certainly changed in the 2000s. In fact, even in the 2014 Lok Sabha elections, economic issues played a key role in deciding which way the voter voted. In fact, survey evidence from the 2014 National Election Study carried out by the Centre for the Study of Developing Societies found that economic issues were the most important determinants of how voters behaved on the day of the election.[1007]

This essentially means that politicians, if they want to keep on winning, need to pursue economic growth as a strategy. Of course, for any sustained economic growth in this low-growth world, reforms, both political as well as economic, are very necessary. These reforms, when carried out at the national level, will ultimately deliver growth at the state level.

I guess it's time that politicians also come around to changing the way that they look at economic growth and economic reforms and that they come around to realising that delivering good economic growth leads to their chances of winning in the next election going up.

The trouble is that any reform takes time to implement. This is why it is important that any new government carry out reforms during the first half of its term, so that the benefits from the reforms are reaped during the second half of its term.

But that hasn't happened with the Modi government. With the next Lok Sabha elections less than two and a half years away, the political cycle has already started, and given this, it is highly unlikely that any major economic or political reforms will be pushed through during the remaining term of the government.

This means that jobs won't be created at the same pace as the growth in the labour workforce. India's demographic dividend will start to unravel. One of the impacts of this will be an increase in the disguised unemployment in agriculture, which would mean greater poverty. At the same time, with the general unemployment going up, the demand for reservations in government jobs from the land-owning upper castes can only go up in the days to come.

With jobs not being created at an adequate pace, economic growth will either be slow (*vis-à-vis* what India needs; we might still be one of the fastest-growing countries in the world) or it will be inequitable. And, over the decades, this will have its own share of political repercussions as well.

As Wucker writes in a slightly different context: "By 2045, Africa will be home to 400 million [40 crore] people between the ages of fifteen and twenty-four who will need livelihoods, without which they will direct their considerable energies to protesting and worse.... How will Africa provide enough jobs for the rising number of youths and

prepare the new generation for whatever the jobs of the future end up being—or risk the kind of unrest that makes the aftermath of the Arab Spring look like a child's playground?"[1008]

Now replace Africa with India in the above paragraph. In fact, more than 54 per cent of India's population is under 25 years of age.[1009] And, if in the decades to come, there aren't enough jobs going around for them, things in India will turn out to be along similar lines as Wucker expects them to be in Africa. While it is difficult to confidently predict an Arab Spring-like situation, it is safe to say that the general joblessness of the nation's youth will have political repercussions.

I sincerely hope that I am wrong about this one, but the signs are simply too ominous and portending for me to try and pretend that they don't exist.

ACKNOWLEDGEMENTS

As I said in the introduction to this book, this book was never meant to be written. But the fact that it did get written is because of everyone who helped me write it.

Andrew Cabral, who relentlessly edited the book and kept asking questions which inevitably made the book better, even if he did go off my radar from time to time. This book wouldn't have been possible without him. And if I do get around to writing more books, I don't think any of those books would be possible without him either.

Bill Bonner did me a great favour and agreed to write the foreword to this book.

And how can I ever thank Manjul for coming up with such a fantastic cover and the cartoons for this book? Their visual appeal add so much to the book.

Preeti Harkare was my first reader, who read through the chapters quickly to give me some sense of where I was heading. As far as first

readers go, she makes for a very good one.

My father, Vir Krishen, who read through the book, picked up many mistakes and gave me some solid feedback to improve the book. Some of the mistakes, if they had made it to print, would have embarrassed me no end.

My grandfather, Soom Nath, read the book and pointed out many silly mistakes which I had missed. He is the best silly mistake catcher that I know of and very encouraging as far as grandfathers go.

Akhilesh Tilotia gave detailed feedback on the book, which, honestly, I haven't been able to do full justice to.

The same stands true for Satyajit Das. His detailed chapter-wise feedback helped in improving the book, even though I couldn't incorporate his suggestions completely.

Nupur Pavan Bang reads almost everything I write, and hence, this time was no different. Her feedback was very important to the way the book finally shaped up.

Many of the ideas discussed and detailed in the book were first written as a part of my regular columns. Given this, I would like to thank Rahul Goel (at *Equitymaster*), R Jagannathan (first at *Firstpost* and later at *Swarajya*), Rajesh Pandathil (at *Firstpost*), Dhirendra Kumar (at *Value Research*), and finally, B Mahesh and Ravi Joshi (at *Bangalore Mirror)*. Developing upon the ideas presented in this book wouldn't have been possible without writing and publishing the columns that I did.

Thanks are also due to a whole host of people all over the world who let me use their research very liberally in this book. This book wouldn't have been possible without these full-time researchers, academics, journalists, analysts and economists.

These include TN Srinivasan, Sanjoy Chakravorty, Arun Kumar, Ram Singh, Maitreesh Ghatak, Parikshit Ghosh, Michael Levien, Ankita Aggarwal, Reetika Khera, Sandip Sukhtankar, Amit Amirapu, Seetha, R Jagannathan, NC Narayanan, Keith Wardrip, Geeta Kingdon and Martin Ravallion (in no particular order).

I would also like to thank the many unnamed economists and analysts who work for the government and write uncredited reports and documents for it. This book most certainly wouldn't have been

possible without the research carried out by these individuals.

Finally, I would like to thank Rahul Goel and his team at *Equitymaster* for publishing this book. Special thanks are due to Karan Janani at *Equitymaster* for helping me with the tables and charts that are a part of this book.

In the end, this book would not have been possible without the patience and blessings of my parents, Vir Krishen and Nimmi.

I would also like to thank my friends Abhijeet Bajpai and Sandeep Shanbhag for being there, as always.

Thanks are also due to my friend Malini for putting up with me while I wrote the book.

To anyone I have inadvertently left off this list, my sincerest apologies.

And finally, any mistakes that remain are mine.

ENDNOTES

Introduction

1 As quoted in T Gilovich and L Ross,*The Wisest One in the Room—How You can Benefit from Social Psychology's Most Powerful Insights*, Free Press, December 2015.
2 Jacobellis v. Ohio, 378 U.S. 184.
3 TN Ninan, *The Turn of the Tortoise—The Challenge and Promise of India's Future,* Penguin Books India, 2015.
4 K Basu, *An Economist in the Real World—The Art of Policymaking in India*, Penguin Viking, 2016.
5 Ibid.
6 V Joshi, *India's Long Road—The Search for Prosperity*,Penguin & Allen Lane, 2016.
7 R Hajela, 'Shortage of Skilled Workers: A Paradox of the Indian Economy', SKOPE Research Paper No. 111, November 2012.
8 This is an estimate made by the NGO Pratham.
9 National Manufacturing Policy, 2011.
10 Joshi, 2016.
11 Ibid.
12 KPMG,*Urban Indian Real Estate – Promising Opportunities*, August 2016.
13 R Singh, 'Inefficiency and Abuse of Compulsory Land Acquisition—An Enquiry into the Way Forward',*Economic & Political Weekly*, May 12, 2012.
14 S Morris and A Pandey, 'Towards Reform of the Land Acquisition Framework in India', IIM Ahmedabad Working Paper, 2007.

15 L Pritchett and LH Summers, 'Asiaphoria Meets Regression to the Mean', NBER Working Paper No. 20573, October 2014.
16 R Sharma,*The Rise and Fall of Nations—Ten Rules of Change in the Post-Crisis World*, Allen Lane, 2016.
17 M Wucker, *The Gray Rhino—How to Recognize and Act on the Obvious Dangers We Ignore*, St. Martin's Press, 2016.
18 Sharma, 2016.
19 S Baru, *1991—How P.V. Narasimha Rao Made History*, Aleph, 2016.

1. Those were the Days, My Friend!

20 P Kalanithi, *When Breath Becomes Fresh Air*, Random House, 2016.
21 'Minimum Government, Maximum Governance', May 14, 2014. Available at http://www.narendramodi.in/minimum-government-maximum-governance-3162. Accessed on May 10, 2016.
22 J Bhagwati, 'Illusory Budget Numbers', *Business Standard*, March 16, 2016.
23 B Bonner, *Hormegeddon—How Too Much of a Good Thing Leads to Disaster,* Lioncrest Publishing, 2014.
24 M Guruswamy, 'Seventh Pay Commission: Is the Centre robbing the poor to pay its employees?', Scroll.in, July 1, 2016.
25 G Das, *India Unbound*, Penguin Books India, 2000.
26 Ibid.
27 S Sanyal, *The Indian Renaissance—India's Rise After a Thousand Years of Decline,* Penguin Books India, 2008.
28 Ibid.
29 S Tharoor, *India—From Midnight to Millennium*, Penguin Books India, 1997.
30 D Acemoglu and JA Robinson, *Why Nations Fail – The Origins of Power*, *Prosperity and Poverty*, Profile Books, 2013.

31 Ibid.
32 Tharoor, 1997.
33 C Wheelan, *Naked Economics—Undressing the Dismal Science*, WW Norton & Company, 2002.
34 Tharoor, 1997.
35 Wheelan, 2002.
36 Tharoor, 1997.
37 Ibid.
38 D Tripathi, *The Oxford History of Indian Business*, Oxford University Press, 2004.
39 Ibid.
40 Ibid.
41 Ibid.
42 Ibid.
43 Ibid.
44 Wheelan, 2002.
45 Ibid.
46 Tripathi, 2004.
47 TN Ninan, *The Turn of the Tortoise—The Challenge and Promise of India's Future*, Penguin Books India, 2015.
48 Sanyal, 2008.
49 A Panagariya, *India—The Emerging Giant*, Oxford University Press, 2008.
50 Najinyanupi, 'Some Philosophic Aspects of the Approach', *Economic & Political Weekly,* Vol. VIII Nos. 4, 5 & 6, Annual Number February 1973, pp 141-143.
51 E Porter, *The Price of Everything*, Random House, 2011.
52 JK Galbraith, *A History of Economics—The Past as the Present*, Penguin Books, 1987.
53 Das, 2000.

2. We have Spread Them too Wide and too Thin

54 KN Das, 'Coal India struggles to produce half of normal output amid strike', Reuters, January 7, 2015.
55 P Bhattacharya, 'Opportunities in a Crisis', *The Indian Express*, September 29, 2014.
56 V Kaul, 'Revealed: The real reason why Coal India unions were on a strike', Equitymaster, January 8, 2015.
57 J Drèze and A Sen, *An Uncertain Glory—India and Its Contradictions*, Penguin & Allen Lane, 2013.
58 A Gulati, 'Budget 2016: Sleight of hand in the farm sector', *The Financial Express*, March 1, 2016.
59 A K Bhattacharya, 'Goodbye to Privatisation', *Business Standard*, October 27, 2015.
60 W Buffett, 'Berkshire Hathaway—Annual Letter to Shareholders', February, 2008.
61 Press Trust of India, 'Air India plans hedging fuel costs up to 25 per cent', March 6, 2016.

3. Perfect is the Enemy of Good

62 R Batabyal (edited by), *The Penguin Book of Modern Indian Speeches*, Penguin, 2007.
63 S Sanyal, *The Indian Renaissance—India's Rise After a Thousand Years of Decline,* Penguin Books India, 2008.
64 J Drèze and A Sen, *An Uncertain Glory—India and Its Contradictions*, Penguin & Allen Lane, 2013.
65 The PROBE Team in association with the Centre for Development Economics, *Public Report on Basic Education in India*, 1999.
66 Ibid.

67 M Kremer, K Muralidharan, N Chaudhury, J Hammer and FH Rogers, *Teacher Absence in India: A Snapshot*, World Bank, 2004.

68 Ibid.
69 S Bhattacharjea, W Wadhwa and R Banerji, *Inside Primary Schools—A Study of Teaching and Learning in Rural India*, ASER Centre, 2011.
70 A Kazmin, 'India: Learning a Hard Lesson', *Financial Times*, May 7, 2015.
71 Kremer et al., 2004.
72 The PROBE Team in association with the Centre for Development Economics, 1999.
73 ASER Centre, *The Annual Status of Education Report*, 2014.
74 Ibid.
75 Ibid.
76 Bhattacharjea et al., 2011.
77 Drèze & Sen, 2013.
78 ASER Centre, *Trends over Time (2006-2014): A Supplement to ASER 2014*, January 2015.
79 ASER Centre, *The National Picture: Rural Findings*, 2014.
80 Ibid.
81 G Kingdon, 'The Impact of the Sixth Pay Commission on Teacher Salaries: Assessing Equity and Efficiency Effects', Research Consortium on Educational Outcomes and Poverty, 2010.
82 Ibid.
83 Ibid.
84 Ibid.
85 Ibid.
86 Drèze & Sen, 2013.
87 L Pritchett and Y Aiyar, 'Value Subtraction in Public Sector Production: Accounting Versus Economic Cost of Primary Schooling in India', Working Paper, Center for Global Development, 2014.
88 Ibid.

89 K Basu, *An Economist in the Real World—The Art of Policymaking in India*, Penguin Viking, 2016.
90 Kazmin, 2015.
91 Ernst & Young, *Right to Education: Role of the Private Sector*, March 2012.
92 ASER Centre, *The Annual Status of Education Report*, 2012.
93 PV Iyer, 'Bring back exams, more weight on learning, teachers', *The Indian Express,* September 14, 2014.
94 Ernst & Young, 2012.
95 ASER Centre, 2014.
96 A Kapur and S Iyer, *Budget Briefs, SSA, GOI 2015-2016*, Accountability Initiative, Centre for Policy Research, February 28, 2015.
97 A Kapur and V Srinivas, *Budget Briefs, SSA, GOI 2016-2017*, Accountability Initiative, Centre for Policy Research, February 26, 2016.
98 Kapur & Iyer, 2015.
99 Kapur & Srinivas, 2016.
100 AV Banerjee and E Duflo, *Poor Economics—Rethinking Poverty and the Ways to End It*, Random House India, 2011.
101 H Damodaran, 'Learning's not about enrolment, latrines in school. We're failing children on a massive scale', *The Indian Express*, February 1, 2015.
102 Kazmin, 2015.
103 ASER Centre, *The Annual Status of Education Report*, 2013.
104 Kazmin, 2015.
105 Damodaran, 2015.
106 ASER Centre, 2014.
107 ASER Centre, 2013.

108 KPMG-CII, *Assessing the Impact of the Right to Education Act*, March 2016.
109 A Tilotia, *The Making of India—Gamechanging Transitions*, Rupa Publications India, 2015.

110 ASER Centre, *The Annual Status of Education Report: Findings from Punjab*, 2015.
111 Ibid.
112 KPMG-CII, 2016.
113 GG Kingdon, 'Schooling without Learning',*The Hindu*, February 8, 2016.
114 Ibid.
115 Ibid.
116 P Jain, 'Recognition of 75% private schools in MP under "threat"', *The Hindustan Times*, May 19, 2016.
117 M Subramanian, 'Chhattisgarh is closing down schools in areas where it should expand them', Scroll.in, July 9, 2016.
118 National Independent Schools Alliance, *Research Brief*, May 2016.
119 Ibid.
120 G Kingdon, 'Schooling without learning: How the RTE Act destroys private schools and destroys standards in public schools', *The Times of India*, August 26, 2015.
121 Ibid.
122 Ibid.
123 TN Ninan, *The Turn of the Tortoise—The Challenge and Promise of India's Future*, Penguin Books India, 2015.

4. Jobs, Jobs, Jobs!

124 J Lanchester, *How to Speak Money*, WW Norton & Company, 2015.
125 Ibid.
126 S Sanyal, *The Indian Renaissance—India's Rise After a Thousand Years of Decline,* Penguin Books India, 2008.
127 A Tilotia, *The Making of India—Gamechanging Transitions*, Rupa Publications India, 2015.
128 Ibid.
129 Ibid.

130 TS Papola and PP Sahu, *Growth and Structure of Employment in India—Long-Term and Post-Reform Performance and the Emerging Challenge*, Indian Council of Social Science Research (ICSSR), March 2012.
131 Institute for Human Development, *India Labour and Employment Report,* 2014.
132 UNDP, *Shaping the Future: How Changing Demographics Can Power Human Development,* Asia Pacific Human Development Report.
133 Data from the Centre for Monitoring Indian Economy.
134 A Hoda and DK Rai, *Labour Regulations and Growth of Manufacturing and Employment in India: Balancing Protection and Flexibility*, written for the World Bank, ICRIER, 2015.
135 Institute for Human Development, 2014.
136 AV Banerjee and E Duflo, *Poor Economics—Rethinking Poverty and the Ways to End It*, Random House India, 2011.
137 Institute for Human Development, 2014.
138 Press Trust of India, 'Unemployment rate increases to 5%, highest in five years in 2015-16', September 29, 2016.
139 S Varma, 'Joblessness at 5-year high, reveals survey', *The Times of India*, October 1, 2016.
140 Press Trust of India, September 2016.
141 Papola & Sahu, 2012.
142 MS Sharma, *Restart—The Last Chance for the Indian Economy*, Random House India, 2015.

143 Tilotia, 2015.
144 D Joshi and V Mahambare, *HIRE & LOWER—Slowdown compounds India's job-creation challenge*, CRISIL Research, January 2014.
145 Ibid.
146 Ibid.
147 Sharma, 2015.

148 Papola & Sahu, 2012.
149 Census of India, 2001, Migration Tables.
150 UNESCO, *Social Inclusion of Internal Migrants in India*, July 2013.
151 Census of India, 2011.
152 *K Munshi and M Rosenzweig,* 'Rural to urban migration in India: Why labour mobility bucks global trend',*The Indian Express*, March 26, 2016.
153 AK Dasgupta, 'Disguised Unemployment and Economic Development', *The Economic Weekly*, August 1956.
154 Sharma, 2015.
155 H de Soto, *The Mystery of Capital—Why Capitalism Triumphs in the West and Fails Everywhere Else*, Black Swan, 2001.
156 Institute for Human Development, 2014.
157 C Wheelan, *Naked Statistics—Stripping the Dread from the Data*, WW Norton & Company, 2014.
158 Ibid.
159 R Matthews, *The Laws of Chance and How They can Work for You*, Profile Books, 2016.
160 Ibid.
161 RH Frank, *The Darwin Economy—Liberty, Competition and the Common Good*, Princeton University Press, 2011.
162 TN Ninan, *The Turn of the Tortoise—The Challenge and Promise of India's Future*, Penguin Books India, 2015.

5. Why Engineers and MBAs Want to Become Peons and Sweepers

163 D Joshi, V Mahambare and P Munjal, *Skilling India—The Billion People Challenge*, CRISIL Research, 2010.
164 Institute for Human Development, *India Labour and Employment Report,* 2014.
165 NSDC-KPMG, *Human Resource and Skill Requirements in the Building Construction and Real Estate Sector*.

166 R Hajela, 'Shortage of Skilled Workers: A Paradox of the Indian Economy', SKOPE Research Paper No. 111, November 2012.
167 Ibid.
168 Aspiring Minds, *Skills—Plumbers*, 2015.
169 Hajela, 2012.
170 NSDC-KPMG, *Human Resource and Skill Requirements in the Building Construction and Real Estate Sector*.
171 MS Sharma, *Restart—The Last Chance for the Indian Economy*, Random House India, 2015.
172 Hajela, 2012.
173 Ibid.
174 Ibid.
175 Ibid.
176 Ibid.
177 From the website of the training institute: http://www.lntecc.com/HOMEPAGE/CSTI/curriculum.htm.
178 Hajela, 2012.
179 Ibid.

180 A Tilotia, *The Making of India—Gamechanging Transitions*,Rupa Publications India, 2015.
181 National Skill Development Corporation, *Annual Report*,2014-2015.
182 NSDC-KPMG, *Human Resource and Skill Requirements in the Building Construction and Real Estate Sector*.
183 *The Financial Express*, 'Getting Skilling Back on Track',October 17, 2015.
184 *Outlook*, '"The NSDC Had No Accountability" – An interview with Rajiv Pratap Rudy', August 10, 2015.
185 D Joshi and V Mahambare *HIRE & LOWER—Slowdown compounds India's job-creation challenge*, CRISIL Research, January 2014.

186 PK Nanda, 'AICTE to cut number of engineering college seats by 600,000',*Mint*, September 25, 2015.
187 Institute for Human Development, 2014.
188 G Kuber, 'In Maharashtra, education is an extension of politics', *The Economic Times,* September 29, 2003.
189 SE Landsburg, *The Armchair Economist*, Free Press, 2012.
190 Ibid.
191 P Malmgren, *Signals—How Everyday Signs can Help Us Navigate the World's Turbulent Economy*, Weidenfeld and Nicolson, 2016.
192 A Tilotia, 'How many graduates are required to change a light bulb?', Kotak Institutional Equities, June 26, 2015.
193 Tilotia, 2015.
194 Tilotia, June 2015.
195 P Sahoo, 'Maharashtra: 38% seats vacant in engineering colleges, online registration till August 5', *The Indian Express*, July 31, 2016.
196 R Sujatha, 'Over 1 lakh engineering seats to remain vacant this year too', *The Hindu,* March 14, 2016.
197 Lok Sabha Unstarred Question No. 2370, Answered by the Ministry of Human Resource Development, August 1, 2016.
198 Ibid.
199 S John, 'This Life is Reserved for L&T', Daily News and Analysis,November 15, 2007.
200 Landsburg, 2012.
201 Institute for Human Development, 2014.
202 Tilotia, 2015.

6. From *Son of India* to *Make in India*

203 SY Deodhar, 'Make in India—Re-chanting the Mantra with a Difference', IIM Ahmedabad Working Paper, February 2015.
204 S Sanghi and A Srija, *Make in India and the potential for job creation*, Sector in Focus, CII, Aug-Sep 2015.

205 Make in India: Reason & Vision for the initiative. Available at www.makeinindia.com.
206 The National Manufacturing Policy, 2011.
207 Deodhar, 2015.
208 TN Ninan, *The Turn of the Tortoise—The Challenge and Promise of India's Future,* Penguin Books India, 2015.
209 Ibid.
210 V Joshi, *India's Long Road—The Search for Prosperity*,Penguin & Allen Lane, 2016.
211 Ibid.
212 The National Manufacturing Policy, 2011.
213 Ibid.
214 Ninan, 2015.

215 J Nehru, *The Discovery of India*, Penguin Books India,New Edition, 2008.
216 Deodhar, 2015.
217 A Panagariya, *India—The Emerging Giant*, Oxford University Press, 2008.
218 S Baru, *1991—How P.V. Narasimha Rao Made History*, Aleph,2016.
219 DK Dash, 'Chinese manufacturers up their game to conform to Indian standards', *The Times of India*, May 5, 2015.
220 R Sharma, *The Rise and Fall of Nations—Ten Rules of Chance in the Post-Crisis World*, Allen Lane, 2016.
221 The Economic Survey of 2015-2016.
222 Joshi, 2016.
223 Sharma, 2016.
224 H-J Chang, *Bad Samaritans—The Guilty Secrets of Rich Nations and the Threat to Global Prosperity*, Random House Business Books, 2008.
225 A Tilotia, 'How many graduates does it take to change a light bulb?', Kotak Institutional Equities, June 2015.

226 Ibid.
227 Sharma, 2016.
228 Joshi, 2016.
229 Deodhar, 2015.
230 Ibid.
231 A Tilotia, *The Making of India—Gamechanging Transitions*,Rupa Publications India, 2015.
232 Ibid.
233 Ibid.
234 Ibid.
235 Ibid.
236 Ibid.
237 Joshi, 2016.
238 A Bhattacharya, A Bruce and A Mukherjee, *Make In India,Turning Vision Into Reality,* Boston Consulting Group and CII, November 2014.
239 Ibid.
240 Ibid.
241 Sharma, 2016.
242 Ibid.
243 The Economic Survey of 2015-2016.
244 A Amirapu and A Subramanian, 'Manufacturing or Services? An Indian Illustration of a Development Dilemma', Working Paper 409, Centre for Global Development, June 2015.
245 Ibid.
246 Ibid.
247 Ibid.
248 Ibid.
249 Ibid.
250 Ibid.
251 Ibid.
252 Ibid.

253 The Economic Survey of 2015-2016.
254 Sharma, 2016.
255 World Trade Organisation, *International Trade Statistics*, 2015.
256 J Mendonca and N Alawadhi, 'IT sector to lose 6.4 lakh jobs to automation by 2021: HfS Research', *The Times of India*, July 5, 2016.
257 R Bergman, *Utopia for Realists—The Case for a Universal Basic Income, Open Borders and a 15-Hour Workweek*, The Correspondent, 2016.
258 Agence France-Presse, 'Reboot: Adidas to make shoes in Germany again – but

using robots', May 25, 2016.
259 J Wakefield, 'Foxconn replaces 60,000 factory workers with robots', BBC.com, May 25, 2016.
260 TNN and Agencies, 'Raymond to replace 10,000 jobs with robots in next 3 years', September 16, 2016.
261 Sharma, 2016.
262 JY Kim, *The World Bank Group's Mission: To End Extreme Poverty*, World Bank President's speech on October 3, 2016.
263 YN Harari, *Homo Deus—A Brief History of Tomorrow*, Harper,2016.
264 Ibid.
265 Ibid.
266 Sharma, 2016.
267 Ibid.
268 'A Conversation with John Markoff.' Available at https://www.edge.org/conversation/john_markoff-the-next-wave Accessed on October 12, 2016.
269 B Bonner, *Hormegeddon—How Too Much of a Good Thing Leads to Disaster*, Lioncrest Publishing, 2014.
270 Bergman, 2016.
271 R Rajan, *Make in India, Largely for India*, The Bharat Ram Memorial Lecture, New Delhi, December 12, 2014.

272 D Joshi and A Verma, *Trade Deficit with China, the elephant in the room*, CRISIL Economy Quickbyte, April 2016.
273 Ibid.
274 Bhattacharya et al., 2014.
275 Ninan, 2015.
276 Bhattacharya et al., 2014.
277 World Bank, *More and Better Jobs in South Asia*, 2012.
278 M Madhu, 'Is India really power surplus?',*The Hindu Business Line*, July 10, 2016.
279 RK Singh, 'India Set to Have First Power Surplus in at Least Eight Years', *Bloomberg*, July 4, 2016.
280 Madhu, 2016.
281 Ibid.
282 Joshi, 2016.
283 Power Finance Corporation, *The Performance of State Power Utilities for the years 2011-12 to 2013-14*, July 2015.
284 Joshi, 2016
285 M Jain, 'India could soon have more electricity than it needs – but power cuts are not going away', Scroll.in, June 16, 2016.
286 S Jain, 'Will Piyush Goyal go the Montek Singh Ahluwalia way?', *The Financial Express*, October 14, 2015.
287 Ibid.
288 Ibid.
289 Joshi, 2016.
290 S Jai and J Mukul, 'India's first smart grid to come up in Gurgaon', *Business Standard,* July 12, 2016.
291 S Sukhtankar and M Vaishnav, *Corruption in India: Bridging Research Evidence and Policy Options*, Brookings-NCAER India Policy Forum, 2014.
292 PC Parakh, *Crusader or Conspirator—Coalgate and Other Truths*, Manas Publications, 2014.
293 Ibid.

294 Ibid.
295 Sukhtankar & Vaishnav, 2014.
296 G Das, *India Grows at Night—A Liberal Case for a Strong State*, Penguin, 2012.
297 Ninan, 2015.

298 MS Sharma, *Restart—The Last Chance for the Indian Economy*, Harper Collins, 2015.
299 Joshi, 2016.
300 K Basu, *An Economist in the Real World—The Art of Policymaking in India*, Penguin Viking, 2016.
301 Ibid.
302 A Teltumbde, 'A case of too many cases', *The Indian Express*,May 23, 2016.
303 Sukhtankar & Vaishnav, 2014.
304 Das, 2012.
305 Teltumbde, 2016.
306 Sukhtankar & Vaishnav, 2014.
307 *The Times of India*, 'High Court judges get just 5-6 minutes to decide cases, says study', April 7, 2016.
308 D Mahapatra, 'Judges' vacancy up from 20 per cent in 2002 to 22 per cent in 2016', *The Times of India*, July 15, 2016.
309 D Mahapatra, 'SC leave delays judges' appointment in High Courts', *The Times of India*, June 16, 2016.
310 *The Times of India*, 'High Court judges get just 5-6 minutes to decide cases, says study', April 7, 2016.
311 S Gandhi, 'Don't need 70,000 judges. Just fill vacancies to cut backlog', *The Times of India*, May 29, 2016.
312 CRISIL Research, *Different Shades*, August 2016.
313 Ibid.
314 Ibid.
315 Times News Network, 'States lobby for GST rate of over 20% to curb revenue loss', August 5, 2016.

316 Ibid.
317 R Jagannathan, 'GST Bill: Cong's 18% rate a pipe dream while Arun Jaitley's 20% economically workable', Firstpost, August 4, 2016.
318 CRISIL Research, 2016.
319 Jagannathan, August 4, 2016.
320 R Jagannathan, '10 Reasons Why GST Warrants A Generous Dose Of Scepticism', Huffington Post India, August 3, 2016.
321 S Mukherjea, R Mukherjee and S Shekhar, 'GST—Overhyped and Misunderstood', Ambit Capital, August 20, 2015.
322 Ibid.
323 Press Trust of India, 'GST to increase India's GDP by 1-2 per cent: Finance Minister Arun Jaitley', April 17, 2015.
324 Mukherjea et al., 2015.
325 Ibid.
326 R Mohan and M Kapoor, 'Pressing the Indian Growth Accelerator: Policy Imperatives', IMF Working Paper, March 2015.
327 E Ghani, WR Kerr and SD O'Connell, *Reshaping Tomorrow*,Oxford University Press, 2011.
328 E Ghani, WR Kerr and SD O'Connell, 'Who Creates Jobs?',Economic Premise, The World Bank, November 2011.
329 Ibid.
330 Bhattacharya et al., 2014.
331 S Rao and P Sinha, *Make in India—Pressing the Pedal*, Yes Bank-ASSOCHAM, May 2015.
332 S Prabhu, Railways Minister's Railways Budget speech,February 2016.
333 Ministry of Railways, *White Paper on the Indian Railways*, February 2015.
334 S Prabhu, Railways Minister's Railways Budget speech, February 2016.
335 *Basic Road Statistics of India, 2012-2013*.

336 Ibid.

337 G Raghuraman, 'An Overview of the Trucking Sector in India: Significance and Structure', IIM Ahmedabad Working Paper, December 2015.
338 Ibid.
339 Ibid.
340 PHD Research Bureau, *Progress of Make in India – Glass Half Full*, PHD Chamber of Commerce and Industry, September 2015.
341 A Kaushal, 'Why freight moves so slowly on Indian roads', *Business Standard*, January 5, 2016.
342 Press Information Bureau Press Release, July 12, 2016.
343 Deodhar, 2015.
344 Mohan & Kapoor, 2015.

7. India's Hotel California Problem

345 A Bhattacharya, A Bruce and A Mukherjee, *CII 13th Manufacturing Summit—Make In India, Turning Vision Into Reality*, Boston Consulting Group and CII, November 2014.
346 V Joshi, *India's Long Road—The Search for Prosperity*,Penguin & Allen Lane, 2016.
347 P Bardhan, *Globalisation, Democracy and Corruption*, Front Page, 2015.
348 J Bhagwati and A Panagariya, *India's Tryst with Destiny—Debunking Myths that Undermine Progress and Addressing New Challenges*, Collins Business, 2012.
349 MS Sharma, *Restart—The Last Chance for the Indian Economy*, Random House India, 2015.
350 Ibid.
351 Annual Survey of Industries, 2013-2014.
352 A Hoda and DK Rai, *Labour Regulations and Growth of Manufacturing and Employment in India: Balancing Protection and Flexibility*, written for the World Bank, ICRIER, 2015.

353 OECD, *Small Businesses, Job Creation and Growth: Facts, Obstacles and Best Practices*.
354 Hoda & Rai, 2015.
355 Bhagwati & Panagariya, 2012.
356 TS Papopla, 'Role of labour regulation reforms in India: Country casestudy on labour', Employment Working Paper No. 147, ILO, 2013.
357 *The Factories Act, 1948* (Act No. 63 of 1948), as amended by *The Factories (Amendment) Act, 1987* (Act 20 of 1987).
358 G Das, *India Grows at Night—A Liberal Case for a Strong State*, Penguin, 2012.
359 Ibid.
360 AN Mathur, 'Is "Make in India" Constrained by Indian Labour Market Regulations?', IIM Ahmedabad Working Paper, March 2016.
361 Papola, 2013.
362 As quoted in a speech titled *Indian Economy: Current Problems and Future Prospects* by TN Srinivasan in January 2003.
363 Hoda & Rai, 2015.
364 K Basu, GS Fields and S Debgupta, 'Retrenchment, Labour Laws and Government Policy: An Analysis with Special Reference to India', paper written for the World Bank, 2001.
365 Ibid.
366 E D'Souza, 'Are Retrenchment Laws Inefficient?', IIM Ahmedabad. Available at http://www.iimahd.ernet.in/assets/ upload/faculty/errolpdf4.pdf. Accessed on October 25, 2016.
367 RC Datta and M Sil, 'Contemporary Issues on Labour Law Reform in India: An Overview', ATLMRI Discussion Paper, Tata Institute of Social Sciences, 2007.
368 Ibid.

369 Hoda & Rai, 2015.
370 As quoted in Basu et al., 2001.

371 Data from the Indian Labour Year Books, 2009 and 2010.
372 Labour Bureau, *Statistics on Industrial Disputes*, 2012.
373 Mathur, 2016.
374 Hoda & Rai, 2015.
375 Economic Survey of 2015-2016.
376 R Mohan and M Kapur, 'Pressing the Indian Growth Accelerator: Policy Imperatives', IMF Working Paper, March 2015.
377 Hoda & Rai, 2015.
378 Mathur, 2016.
379 S Deakin and A Haldar, 'How Should India Reform Its Labour Laws?', Working Paper, CBR Research Programme on Corporate Governance, March 2015.
380 Ibid.
381 Hoda & Rai, 2015.
382 Mathur, 2016.
383 Bhagwati & Panagariya, 2012.
384 Ibid.
385 Hoda & Rai, 2015.
386 Ibid.
387 Ibid.
388 Datta & Sil, 2007.
389 TN Srinivasan, *Indian Economy: Current Problems, Future Prospects*, 2003.
390 Hoda & Rai, 2015.
391 Papola, 2013.
392 Mathur, 2016.
393 DK Das, H Chowdhury and J Singh, 'Contract Labour (Regulation and Abolition) Act 1970 and Labour Market Flexibility: An Exploratory Assessment of Contract Labour', Working Paper, ICRIER, June 2015.

394 All-India Organisation of Employers, *Industrial Relations and Contract Labour in India.* Available at http://aioe.in/html/ IndustrialRelations.pdf. Accessed on October 25, 2016.
395 Ibid.
396 Das et al., 2015.
397 Ibid.
398 Ibid.
399 Ibid.
400 Ibid.
401 Hoda & Rai, 2015.
402 Papola, 2013.
403 Hoda & Rai, 2015.
404 Mathur, 2016.
405 Hoda & Rai, 2015.
406 Srinivasan, 2003.
407 Ibid.
408 Das et al., 2015.
409 Ibid.
410 Ibid.
411 Ibid.
412 Datta & Sil, 2007.
413 All-India Organisation of Employers, *Industrial Relations and Contract Labour in India.*
414 Ibid.
415 J Harriss, 'Labour Problems—Recent Developments in India', *ISAS Insights*, March 2016.
416 Ibid.
417 All-India Organisation of Employers, *Industrial Relations and Contract Labour in*

India.
418 Ibid.
419 Hoda & Rai, 2015.
420 Ibid.

421 Ibid.
422 All-India Organisation of Employers, *Industrial Relations andContract Labour in India*.
423 Ibid.
424 *Business Standard*, 'Fixed-term employment will create jobs, reduce employer's fear', June 2015.
425 S Jha and I Dhasmana, 'We are taking two steps forward, unions one step backward: Bandaru Dattatreya', *Business Standard*, September 2, 2015.
426 Ibid.
427 All-India Organisation of Employers, *Industrial Relations and Contract Labour in India*.
428 A Subramanian and R Verma, 'Stitching up Employment', *The Indian Express*, June 23, 2016.
429 Ibid.
430 A Panagariya, 'Why India lags behind China and how it can bridge the gap', *The World Economy*, Volume 30, Issue 2, pp. 229-248, February 2007.
431 Bhagwati & Panagariya, 2012.
432 Mathur, 2016.
433 Hoda & Rai, 2015.
434 Ibid.
435 Mathur, 2016.
436 SY Deodhar, 'Make in India—Re-Chanting the Mantra with a Difference', IIM Ahmedabad Working Paper, February 2015.
437 Hoda & Rai, 2015.
438 Ibid.
439 Surabhi, 'Labour reforms: On track, but tough job ahead', *The Indian Express*, May 6, 2015.
440 *The Hindu*, '44 labour laws to be amalgamated into 4 codes', October 15, 2015.

441 FICCI and All India Organisation of Employers, *Suggested Labour Policy Reforms*, 2014.
442 S Sukhtankar and M Vaishnav, *Corruption in India: Bridging Research Evidence and Policy Options*, Brookings-NCAER India Policy Forum, 2014.

8. A Four-Letter Word Called Land

443 As quoted in A Goswami, 'Land Acquisition, Rehabilitation and Resettlement: Laws and Politics', IIHS Working Paper, 2012.
444 RK Kumar, 'An Elephant called Manufacturing', *The Hindu Business Line*, March 8, 2015.
445 S Morris and A Pandey, 'Towards Reform of Land Acquisition Framework in India', IIM Ahmedabad Working Paper, 2007.
446 S Chakravorty, *The Price of Land—Acquisition, Conflict, Consequence*, Oxford University Press, 2013.
447 Ibid.
448 A Goswami, 'Land Acquisition, Rehabilitation and Resettlement: Laws and Politics', IIHS Working Paper, 2012.
449 As quoted in *The Standing Committee Report on the Land Acquisition Rehabilitation and Resettlement Bill, 2011*, Department of Land Resources, Ministry of Rural Development, Government of India.
450 J Ramesh and MA Khan, *Legislating for Justice—The Making of the 2013 Land*

Acquisition Law, Oxford University Press, 2015.
451 Ibid.
452 Goswami, 2012.
453 Chakravorty, 2013.
454 A Panagariya, *India—The Emerging Giant*, Oxford University Press, 2008.
455 Morris & Pandey, 2007.
456 *The Land Acquisition Act, 1894*.
457 Chakravorty, 2013.

458 Ramesh & Khan, 2015.
459 *The Land Acquisition Act, 1894*.
460 Chakravorty, 2013.
461 M Ghatak and P Ghosh, 'The Land Acquisition Bill: A Critique and a Proposal', *Economic & Political Weekly*, October 8, 2011.
462 Ramesh & Khan, 2015.
463 Morris & Pandey, 2007.
464 Goswami, 2012.
465 Ministry of Rural Development,*The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013, – An Overview,* September 2013.
466 Ramesh & Khan, 2015.
467 Ibid.
468 Department of Land Resources, Ministry of Rural Development, Government of India, *Standing Committee Report on the Land Acquisition Rehabilitation and Resettlement Bill, 2011*.
469 Ibid.
470 M Levien, 'From Primitive Accumulation to Regimes of Dispossession: Six Theses on India's Land Question,' *Economic & Political Weekly*, May 30, 2015.
471 Goswami, 2012.
472 Ramesh & Khan, 2015.
473 Department of Land Resources, Ministry of Rural Development, Government of India, *Standing Committee Report on the Land Acquisition Rehabilitation and Resettlement Bill, 2011*.
474 Morris & Pandey, 2007.
475 R Singh, 'Inefficiency and Abuse of Compulsory Land Acquisition—An Enquiry into the Way Forward', *Economic & Political Weekly*, May 12, 2012; and Goswami, 2012.
476 Ramesh & Khan, 2015.
477 Ghatak & Ghosh, 2011.
478 Singh, 2012.

479 Ramesh & Khan, 2012.
480 J Sood, 'Road to Disaster', *Down to Earth*, June 15, 2011.
481 S Ramanathan, 'Vasundhara Raje wins the "title" on reforms', *Mint*, April 8, 2016.
482 Morris & Pandey, 2007.
483 H de Soto, *The Mystery of Capital—Why Capitalism Triumphs in the West and Fails Everywhere Else*, Black Swan, 2001.
484 Ibid.
485 Ibid.
486 A Tilotia, *The Making of India—Gamechanging Transitions*, Rupa Publications India, 2015.
487 Chakravorty, 2013.
488 Ibid.
489 Ghatak & Ghosh, 2011.
490 Ibid.
491 Singh, 2012.
492 Morris & Pandey, 2007.

493 Singh, 2012.
494 Ibid.
495 Ghatak & Ghosh, 2011.
496 Singh, 2012.
497 Ibid.
498 Tilotia, 2015.
499 K Kulkarni, 'Farmers' SEZ face a rough ride', *Business Standard*, February 5, 2008.
500 Singh, 2012.
501 Ministry of Rural Development, *Standing Committee Report on the Land Acquisition Rehabilitation and Resettlement Bill, 2011*.
502 Ibid.
503 Ibid.
504 Chakravorty, 2013.
505 Levien, 2015.

506 Ibid.
507 Chakravorty, 2013.
508 Ibid.
509 G Raghuram and S Sunny, 'Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Ordinance, 2014 – A Process Perspective', IIM Ahmedabad Working Paper, July 2015.
510 Levien, 2015.
511 Ibid.
512 Ibid.
513 M Levien, 'Regimes of Dispossession: From Steel Towns to Special Economic Zones', *Development and Change*, 2013.
514 Ibid.
515 Ibid.

516 As quoted in Ramesh & Khan, 2015.
517 Ibid. (Author's translation from Hindi to English.)
518 As quoted in Ramesh & Khan, 2015.
519 Department of Land Resources, Ministry of Rural Development, *The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 – An Overview*.
520 Ibid.
521 S Sharma, 'BJP's claim that farmers would get four times the value of their land isn't true in its own states', Scroll.in, February 24, 2015.
522 Ibid.
523 M Ghatak, S Mitra, D Mookherjee and A Nath, 'Land Acquisition and Compensation—What Really Happened in Singur?', *Economic & Political Weekly*, May 25, 2015.
524 Ramesh & Khan, 2015.
525 Section 5 of *The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013*.

526 Department of Land Resources, Ministry of Rural Development, *The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 – An Overview*.
527 Chakravorty, 2013.
528 N Hebbar, 'Land Bill debate: BJP fishes out Nehru quote to counter Congress', *The Economic Times*, April 21, 2015.
529 Chakravorty, 2013.
530 Department of Land Resources, Ministry of Rural Development, *The Right to Fair Compensation and T ransparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 – An Overview*.
531 Ramesh & Khan, 2015.
532 Ministry of Rural Development, *Standing Committee Report on the Land Acquisition Rehabilitation and Resettlement Bill, 2011*.
533 Ibid.
534 Ramesh & Khan, 2015.
535 Raghuram & Sunny, 2015.
536 Ibid.
537 FE Bureau, 'India Inc Tepid to Changes in Land Act', *The Financial Express*, December 30, 2014.
538 Raghuram & Sunny, 2015.
539 As quoted in Raghuram & Sunny, 2015.
540 Ghatak & Ghosh, 2011.
541 Levien, 2015.
542 Section 10(3) of *The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013*.
543 S Saha, '"Prohibiting the use of agricultural land for industries is ultimately self-defeating"—An interview with Amartya Sen', *The Telegraph*, July 7, 2007.
544 Ibid.

545 Ghatak & Ghosh, 2011.
546 Ramesh & Khan, 2015.
547 Ghatak & Ghosh, 2011.
548 Morris & Pandey, 2007.
549 Ghatak & Ghosh, 2011.
550 Chakravorty, 2013.
551 Ibid.
552 RM Mukherjee and S Shekhar, 'Failure to amend land law to exacerbate sense of "policy drift"', Ambit Capital, August 10, 2015.
553 S Singh, 'Land Acquisition Bill: Congress readies to keep food bill momentum

going', Firstpost, August 28, 2013.
554 Raghuram & Sunny, 2015.
555 Ramesh & Khan, 2015.

9. Black Money—We Won't Get It Back

556 As quoted in A Kumar, *The Black Economy in India*, Penguin Books India, 1999.
557 Ministry of Finance, *White Paper on Black Money*, 2012.
558 Ibid.
559 S Baru, *1991—How P.V. Narasimha Rao Made History*, Aleph, 2016.
560 FICCI,*Widening of Tax Base and Tackling Black Money*, 2015.
561 A Kumar, *The Black Economy in India*, Penguin Books India, 1999.
562 M Balachandran, 'Thomas Piketty just can't understand India's strange secrecy over income tax data', Quartz, January 21, 2016.
563 B Sivakumar, 'Number of housing loan accounts dips 2.7 per cent', Times News Network, January 3, 2015.
564 Staff Reporter, 'Average Home Loan Size Grows to Rs. 19 lakh', Money Guru India, April 2, 2014.

565 A Tilotia, *The Making of India—Gamechanging Transitions*, Rupa Publications India, 2015.
566 Press Trust of India, '1.02 crore houses lying vacant in India, says CBRE', April 29, 2015.
567 Kumar, 1999.
568 V Kaul, 'What Do Car Sales Tell Us About Black Money?', Equitymaster, May 9, 2016.
569 Kumar, 1999.
570 CK Prahalad, *The Fortune at the Bottom of the Pyramid*, Wharton School Publishing, 2004.
571 Ibid.
572 R Nair, 'NDA plans to rewrite direct tax laws', *Mint*, October 28, 2015.
573 R Sharma, *The Rise and Fall of Nations—Ten Rules of Change in the Post-Crisis World*, Allen Lane, 2016.
574 Press Trust of India, 'ITR asset disclosure norm to affect 1.5 lakh ultra rich: Adhia', April 1, 2016.
575 Sharma, 2016.
576 Kumar, 1999.
577 KPMG, *Urban Indian Real Estate – Promising Opportunities,* August 2016.
578 HT Correspondent, 'One lakh jewellers on strike to protest PAN rule on gold purchases', *The Hindustan Times*, February 10, 2016.
579 H-J Chang, *Bad Samaritans—The Guilty Secrets of Rich Nations and the Threat to Global Prosperity*, Random House Business Books, 2008.
580 PR Lane and GM Milesi-Ferretti, 'Cross-Border Investment in Small International Financial Centers', IMF Working Paper, 2010.
581 *The Economist*, 'The missing $20 trillion', February 16, 2013.
582 Ibid.

583 G Zucman, *The Hidden Wealth of Nations—The Scourge of Tax Havens*, The University of Chicago Press, 2015.
584 Ibid.
585 Ibid.
586 Ibid.
587 Ibid.
588 P Rangaprasad, 'Issues Related to Black Money', Employment News, February 8, 2014.
589 Zucman, 2015.

590 Ibid.
591 Ibid.
592 D Graeber, *Debt: The First 5,000 Years*, Melville House, 2011.
593 JG Gravelle, 'Tax Havens: International Tax Avoidance and Evasion', Congressional Research Service, 2013.
594 Zucman, 2015.
595 Ibid.
596 Ministry of Finance, *White Paper on Black Money*, 2012.
597 Ibid.
598 A Kumar, 'Amnesty by another name', *The Indian Express*, October 6, 2016.
599 Kumar, 1999.
600 Ibid.
601 Ibid.
602 Ibid.
603 P Mehra, 'Black economy now amounts to 75 per cent of GDP', *The Hindu*, August 4, 2014.
604 Kumar, 1999.
605 *The Hindu*, 'Dark truths about money', August 7, 2014.
606 Chang, 2008.
607 Ibid.

608 S Subramanian, 'HDFC's Deepak Parekh wrong on land purchases? Here's why', *The Financial Express*, June 28, 2016.
609 A Jaitley, Address at the 31st Annual Conference of Principal Chief Commissioners of Income Tax, May 25, 2015.
610 Sharma, 2016.
611 *The Financial Express*, 'Black Money—Should the taxman crack down now?', June 28, 2016.

10. The Fiscal Deficit Fudge

612 A Gulati, 'From Plate to Plough: The Fertilizer Challenge', *The Indian Express*, December 21, 2015.
613 S Das, 'Budget 2016: Food bill may see up to Rs. 20,000 crore over-run',*The Financial Express*, February 10, 2016.
614 R Rajan, *Financial Reforms: Past and Present*, RBI Governor's speech at the National Council for Applied Economic Research, January 29, 2016.
615 R Malik, 'Fiscal Adventure, Monetary Dilemma', *Mint*, February 4, 2016.
616 H Hazlitt, *Economics in One Lesson*, Three Rivers Press, 1979.
617 Ibid.
618 Press Trust of India, 'Govt to control LPG, diesel pricing', November 18, 2004.
619 S Chaturvedi and P Sahu, 'India Frees Diesel Prices from Government Control', *The Wall Street Journal*, October 20, 2014.
620 *The Financial Express*, 'Black Money—Should the taxman crack down now?', June 28, 2016.
621 SK Ghosh, *If wishes were horses*, Ecowrap, State Bank of India, March 17, 2016.
622 Ibid.

11. It's Not the Interest Rate, Stupid!

623 R Sharma, *The Rise and Fall of Nations—Ten Rules of Change in the Post-Crisis World*, Allen Lane, 2016.
624 Ibid.
625 O Goswami, 'When "bad banks" work; when they don't', *Business Standard*, August

20, 2015.
626 Ibid.
627 P Agarwal and R Bahl, 'For banks, no respite from bad loans this year', CRISIL Ratings, May 12, 2015.
628 A Agarwal, S Kariwala and S Iyer, 'A Growing Need for Indian TARP', Morgan Stanley Asia Insight, June 8, 2015.
629 Indradhanush Press Release.
630 AS Blinder, *After the Music Stopped*, Penguin Books, 2013.
631 MA El-Erian, *The Only Game in Town—Central Banks, Instability and Avoiding the Next Collapse*, Yale University Press, 2016.
632 As per the analyst's presentation of the bank on March 31, 2016.
633 S Gupta, 'National Interest: India Stinc', *The Indian Express*, February 15, 2014.
634 R Rajan, *Saving Credit*, the Third Dr. Verghese Kurien Memorial Lecture at IRMA, Anand, November 25, 2014.
635 A Singh, A Diwanji and M Shrivastava, 'Unmasking India's NPA issues – Can the banking sector overcome this phase?', EY, 2015.
636 A Gupta, K Shah and P Kumar, *The House of Debt*, Credit Suisse, October 21, 2015.
637 Ibid.
638 Rajan, 2014.
639 Definition of the Principal-Agent Problem, from 'The Financial Times Lexicon'.
640 V Joshi, *India's Long Road—The Search for Prosperity*, Penguin & Allen Lane, 2016.

641 Singh et al., 2015.
642 Joshi, 2016.
643 LR Wray, *Why Minsky Matters—An Introduction to the Work of a Maverick Economist*, Princeton University Press, 2016.
644 Ibid.
645 Ibid.
646 Rajan, 2014.
647 Ibid.
648 Ibid.
649 C Mitra, 'Rajan Appeared Uncaring about India's Aspirations',NDTV.com, June 20, 2016.
650 R Rajan, *Resolving Stress in the Banking System*, RBI Governor's speech at the ASSOCHAM Interactive Meet with Industry & Trade, Bengaluru, June 22, 2016.
651 Ibid.
652 Ibid.
653 Ibid.
654 R Rajan, *The fight against inflation: A measure of our institutional development*, Foundation Day Lecture at Tata Institute of Fundamental Research, Mumbai, June 20, 2016.
655 Joshi, 2016.
656 R Mohan and M Kapur, 'Pressing the Indian Growth Accelerator: Policy Imperatives', IMF Working Paper, March 2015.
657 Ibid.
658 Indradhanush Press Release.
659 V Acharya and KV Subramanian, *State intervention in banking:The relative health of Indian public sector and private sector banks*, Project Report, NYU Stern School of Business, 2015.
660 Ibid.
661 R Kumar, GD Krishna and S Bhardwaj, *Indradhanush— Banking Sector Reforms*, Centre for Policy Research, 2015.
662 Rajan, 2014.

663 Ibid.
664 Ibid.

665 Ibid.
666 Kumar et al., 2015.
667 Ibid.
668 SBI Analyst's Presentation for 2015-2016.
669 Bank of Baroda Analyst's Presentation for 2015-2016.
670 Punjab National Bank Analyst's Presentation for 2015-2016.
671 S Shukla, 'JP development will lead to more firms deleveraging their books', *The Economic Times*, July 6, 2016.
672 BS Reporter, Banks on take-over drive of defaulting companies, *Business Standard*, December 5, 2015.
673 P Pandey, 'The biggest ever fire sale of Indian corporate assets has begun, to tide over bad loans crisis', *The Hindu*, May 9, 2016.
674 Kumar et al., 2015.
675 Ibid.
676 Ibid.

12. The Biggest Government

677 As quoted on the webiste https://bfi.uchicago.edu/news/ post/milton-friedman-his-own-words. Accessed on August 23, 2016.
678 SA Ashraf, 'IPL games will waste 60 lakh litres in a drought-hit state', Rediff, April 5, 2016.
679 KD Tare, 'Latur—The Great Thirst', *India Today*, March 30, 2016.
680 Times News Network, 'Mumbai loses 25% water to leakage theft', *The Times of India,* March 15, 2016; and R Pinto, '"Why only water cuts? Why not curb theft, leakage?" citizens ask BMC', *The Times of India* August 22, 2015.
681 Commission for Agricultural Costs and Prices, *Price Policy for Sugarcane: 2016-17 Sugar Season*.

682 Ibid.
683 Economic Survey of 2015-2016.
684 Commission for Agricultural Costs and Prices, *Price Policy for Sugarcane: 2016-17 Sugar Season* and *Price Policy for Sugarcane: 2014-15 Sugar Season*.
685 South Asia Network on Dams, Rivers and People, 'How is the 2012-13 Maharashtra Drought worse than the one in 1972?', March 30, 2013. Available at https://sandrp.wordpress.com/2013/03/30/ how-is-2012-13-maharashtra-drought-worse-than-the-one-in-1972/. Accessed on August 3, 2016.
686 H Damodaran, 'Another Maharashtra verdict: Sugar goes private', *The Indian Express,* October 22, 2014.
687 Ibid.
688 Commission for Agricultural Costs and Prices, *Price Policy for Sugarcane: 2016-17 Sugar Season* and *Price Policy for Sugarcane: 2015-16 Sugar Season*.
689 T Sawhney, *The Current Sugarcane Pricing Policy and Its Critical Analysis*, Indian Sugar Mills Association, 2016.
690 Commission for Agricultural Costs and Prices, *Price Policy for Sugarcane: 2016-17 Sugar Season*.
691 Ibid.
692 Lok Sabha Questions, *Distance Between Sugar Mills*, December 20, 2011. Available at http://www.indiansugar.com/ Lokhsabhadetail.aspx?Lid = 16. Accessed on August 4, 2016.
693 Commission for Agricultural Costs and Prices, *Price Policy for Sugarcane: 2016-17 Sugar Season*.
694 Ibid.
695 Ibid.
696 Ibid.
697 S Sukhtankar, 'Sweetening the Deal? Political Connections and Sugar Mills in

India', *American Economic Journal*, 2012.

698 *Report of the High Level Committee on Reinventing the Role and Restructuring of the Food Corporation of India*, January 2015.
699 S Saini and M Kozicka, 'Evolution of Critique of Buffer Stocking Policy of India', Working Paper 283, ICRIER, September 2014.
700 KS Acharya, *Food Security System of India: Evolution of the Buffer Stocking Policy and its Evaluation*, Concept Publishing Company, 1983.
701 Saini and Kozicka, 2014.
702 World Bank, Rural Development Sector Unit, South Asia Region, *India Foodgrain Marketing Policies: Reforming to Meet Food Security Needs*, August 17, 1999.
703 Ibid.
704 Saini & Kozicka, 2014.
705 Ibid.
706 World Bank, 1999.
707 Saini & Kozicka, 2014.
708 Ibid.
709 S Balani, *Functioning of the PDS—An Analytical Report*, PRS Legislative Research, December 2013.
710 World Bank, 1999.
711 *Report of the High Level Committee on Reinventing the Role and Restructuring of the Food Corporation of India*, January 2015.
712 Ibid.
713 Ibid.
714 Ibid.
715 Ibid.
716 Ibid.
717 Press Trust of India, 'Food Security Act to be implemented in all states by next month: Ram Vilas Paswan', June 26, 2016.
718 Balani, 2013.
719 Ibid.

720 Rajya Sabha Unstarred Question No. 2530, answered by the Ministry of Consumer Affairs, Food and Public Distribution on August 1, 2014.
721 S Saini and A Gulati, 'The National Food Security Act (NFSA) 2013—Challenges, Buffer Stocking and the Way Forward', ICRIER Working Paper 297, March 2015.
722 Ibid.
723 R Khera, 'Trends in Diversion of Grain from the PDS', *Economic & Political Weekly*, May 21, 2011.
724 Ibid.
725 Ibid.
726 A Gulati, J Gujral, T Nandakumar, S Jain, S Anand, S Rath and P Joshi, *National Food Security Bill—Challenges and Options*, Commission for Agricultural Costs and Prices, December 2012.
727 J Drèze and R Khera, 'Understanding Leakages in the PDS', *Economic & Political Weekly*, February 2015.
728 Ibid.
729 Lok Sabha Unstarred Question Number No. 256, answered by Ministry of Consumer Affairs, Food and Public Distribution, February 26, 2013.
730 Drèze & Khera, 2015.
731 A Gulati and S Saini, 'Leakages from PDS and the Way Forward', ICRIER Working Paper 294, January 2015.
732 Ibid.
733 Ibid.
734 Ibid
735 Ibid.

736 Saini & Kozicka, 2014.
737 VP Sharma and H Vardhan, *Assessment of Marketed and Marketable Surplus of Major Foodgrains in India*, Final Report, Centre for Management in Agriculture, IIM Ahmedabad, April 2015.

738 A Gulati and S Saini, 'Buffer Stocking Policy in the wake of NFSB: Concepts, Empirics and Policy Implications', CACP Discussion Paper No. 6, May 2013.
739 V Kaul, 'Right to food security will make things more difficult for the salaried middle class', Firstpost, March 20, 2013.
740 Gulati & Saini, May 2013.
741 VP Sharma, 'Food Subsidy in India: Trends, Causes and Policy Reform Options', IIM Ahmedabad Working Paper, August 2012.
742 Ibid.
743 Z Haq, 'Deep in the red: Debt-ridden Food Corporation of India faces a reckoning', *The Hindustan Times*, August 5, 2016.
744 Saini & Kozicka, 2014.
745 *Report of the High Level Committee on Reinventing the Role and Restructuring of the Food Corporation of India*, January 2015.
746 A Walia and J Sharma, 'Free power, the bane of farming in Punjab', *The Hindu Business Line*, August 15, 2015.
747 *Report of the High Level Committee on Reinventing the Role and Restructuring of the Food Corporation of India*, January 2015.
748 Economic Survey of 2015-2016.
749 *Agricultural Statistics at a Glance, 2014*.
750 Ibid.
751 Ibid.
752 *Agricultural Statistics at a Glance, 2014*; and Commission for Agricultural Costs and Prices, *Price Policy for Kharif Crops— The Marketing Season for 2016-17*.
753 Ibid.
754 *Commodity Profile of Pulses*, July 2016.
755 Commission for Agricultural Costs and Prices, *Price Policy for Kharif Crops—The Marketing Season for 2016-17*.
756 Ibid.
757 Data taken from the NAFED website.

758 Lok Sabha Unstarred Question No. 290, answered by the Ministry of Consumer Affairs, Food and Public Distribution on July 19, 2016.
759 Ibid.; and Lok Sabha Unstarred Question No. 2747, answered by the Ministry of Consumer Affairs, Food and Public Distribution on August 2, 2016.
760 A Gulati and S Saini, 'Bad cure for a racing pulse', *The Indian Express*, October 23, 2015.
761 Third Advanced Estimate of 2015-2016.
762 Economic Survey of 2015-2016.
763 A Gulati and S Saini, 'The dal-bhat conundrum', *The Financial Express*, June 18, 2015.
764 A Gulati and P Banerjee, 'Rationalising the Fertilizer Subsidy in India—Key Issues and Policy Options', ICRIER Working Paper 307, August 2015.
765 Ibid.
766 Express News Service, 'Fertilizer subsidy dues may cross Rs. 45k cr. by March 2016', *The Indian Express*, December 2, 2015.
767 Gulati & Banerjee, 2015.
768 Economic Survey of 2015-2016.
769 Ibid.
770 Gulati & Banerjee, 2015.
771 F Hayek, 'The Use of Knowledge in Society', *The American Economic Review*, Vol. 35, No. 4 (Sep. 1945), pp. 519-530.

772 M Ridley, *The Evolution of Everything—How New Ideas Emerge*, Harper Collins, 2015.
773 Economic Survey of 2015-2016.
774 Express News Service, 'CBI Files Case Against 3 for Black Marketing of Urea', March 23, 2016.
775 Economic Survey of 2015-2016.
776 CMIE Data.

777 Economic Survey of 2015-2016.
778 Calculation done on the basis of consumption data taken from *Indian Fertilizer Scenario, 2014*.
779 Gulati & Banerjee, 2015.
780 Calculation done on the basis of consumption data taken from *Indian Fertilizer Scenario, 2014*.
781 Ibid.
782 Gulati & Banerjee, 2015.
783 *Report of the Working Committee of the Fertilizer Industry for the Twelfth Plan*.
784 Gulati & Banerjee, 2015.
785 Economic Survey of 2015-2016.
786 Lok Sabha Unstarred Question No. 3772, answered by the Ministry of Chemicals and Fertilizers on August 9, 2016.
787 Lok Sabha Unstarred Question No. 1580, answered by the Ministry of Chemicals and Fertilizers on May 3, 2016.
788 K Datta, 'Neem-coated truth: Urea policy isn't a game-changer', *Business Standard*, February 16, 2016.
789 Lok Sabha Unstarred Question No. 1580, answered by the Ministry of Chemicals and Fertilizers on May 3, 2016.
790 Datta, 2016.
791 Lok Sabha Unstarred Question No. 2575, answered by the Ministry of Chemicals and Fertilizers on August 2, 2016.
792 Ibid.
793 Datta, 2016.
794 Gulati & Banerjee, 2015.
795 Ibid.
796 As quoted in R Bergman, *Utopia for Realists—The Case For a Universal Basic Income, Open Borders and a 15-Hour Workweek*, The Correspondent, 2016.
797 Ibid.
798 Ibid.

799 Gulati & Banerjee, 2015.
800 Economic Survey of 2015-2016.
801 Press Trust of India, 'Government strikes out 1.6 crore bogus ration cards, to save Rs. 10,000 crore', June 26, 2016.
802 GC Prasad, 'CAG warns on LPG usage practices of commercial users', *Mint*, August 13, 2016.
803 Ibid.
804 Economic Survey of 2015-2016.
805 Ibid.
806 Press Information Bureau, 'DBT in Kerosene to be implemented in 39 districts during 2016-17', August 1, 2016.
807 Ibid.
808 Seetha, 'Modi's DBT Review 1: Chandigarh Stumbles but Project Needs Support', Swarajyamag.com, May 2, 2016. Available at http://swarajyamag.com/economyarbitrary-inclusions-and-exclusions-make-it-a-rough-ride-for-cashtransfers-pilot-in-chandigarh. Accessed on August 13, 2016.
809 Ibid.

810 Ibid.
811 Seetha, 'DBT in Food: Quality of Grain, Quantity of Cash is the Key — Part II', Swarajyamag.com, August 9, 2016. Available at http://swarajyamag.com/economy/dbt-in-food-quality-of-grain-quantity-of-cash-is-the-key-part-ii. Accessed on August 13, 2016.
812 Seetha, 'DBT in Food: Puducherry Residents give Guarded Welcome', Swarajyamag.com, August 8, 2016. Available at http://swarajyamag.com/economy/dbt-in-food-puducherry-residents-give-guarded-welcome. Accessed on August 13, 2016.
813 Seetha, August 9, 2016.
814 Seetha, August 8, 2016.
815 Ibid.

816 Seetha, August 9, 2016.
817 Express News Service, 'Aadhaar seeding must for paddy procurement', August 12, 2016.
818 Ibid.
819 Data accessed from http://www.pmjdy.gov.in/account.
820 Economic Survey of 2015-2016.
821 Gulati & Banerjee, 2015.

13. The Right to Work?

822 J Drèze, 'Employment Guarantee and the Right to Work', in *The Oxford Companion to Politics in India*, Oxford University Press, 2011.
823 Ibid.
824 Ministry for Rural Development and National Institute of Rural Development and Panchayati Raj, *Frequently Asked Questions on MGNREGA Operational Guidelines, 2013*.
825 www.nrega.nic.in.
826 *Frequently Asked Questions on MGNREGA Operational Guidelines, 2013*.
827 Drèze, 2011.
828 P Niehaus and S Sukhtankar, 'Corruption Dynamics: The Golden Goose Effect', *American Economic Journal*: *Economic Policy*, November 2013.
829 *Frequently Asked Questions on MGNREGA Operational Guidelines, 2013*.
830 Ibid.
831 Ibid.
832 Ibid.
833 Ibid.
834 Niehaus & Sukhtankar, November 2013.
835 *Frequently Asked Questions on MGNREGA Operational Guidelines, 2013*.

836 Ibid.
837 Ibid.
838 Ibid.
839 Ibid.
840 Drèze, 2011.
841 Ibid.
842 *Frequently Asked Questions on MGNREGA Operational Guidelines, 2013*.
843 Ibid.
844 D Kapur, 'The Political Economy of the State', in *The Oxford Companion to Politics in India*, Oxford University Press, 2011.
845 S Sukhtankar and M Vaishnav, *Corruption in India: Bridging Research Evidence and Policy Options*, Brookings-NCAER India Policy Forum, 2014.
846 Kapur, 2011.
847 S Bhalla, 'MGNREGA does not help the poor', *The Indian Express*, February 6, 2016.
848 Ibid.
849 Ibid.

850 Niehaus & Sukhtankar, November 2013.
851 K Muralidharan, P Niehaus and S Sukhtankar, 'Building State Capacity: Evidence from Biometric Smartcards in India', (forthcoming) *American Economic Review*.
852 Niehaus & Sukhtankar, November 2013.
853 P Niehaus and S Sukhtankar, 'The Marginal Rate of Corruption in Public Programs: Evidence from India', *Journal of Public Economics*, August 2013.
854 Ibid.
855 A Aggarwal, 'The MGNREGA Crisis—Insights from Jharkhand', *Economic & Political Weekly*, May 28, 2016.
856 Ibid.
857 Ibid.

858 Ibid.
859 Ibid.
860 Ibid.
861 NC Narayanan and N Lokhande, 'Designed to Falter—MGNREGA Implementation in Maharashtra', *Economic & Political Weekly*, June 29, 2013.
862 Ibid.
863 Ibid.
864 Ibid.
865 Ibid.
866 Ibid.
867 TH Chowdhary, 'NREGA is money down the drain', *The Hindu Business Line*, December 23, 2011.
868 Ibid.
869 Niehaus & Sukhtankar, August 2013.
870 Ibid.
871 Niehaus & Sukhtankar, November 2013.
872 Niehaus & Sukhtankar, August 2013.
873 Ibid.
874 Niehaus & Sukhtankar, November 2013.
875 Niehaus & Sukhtankar, August 2013.
876 Niehaus & Sukhtankar, November 2013.
877 Niehaus & Sukhtankar, August 2013.
878 Economic Survey of 2015-2016.
879 Aggarwal, 2016.
880 Ibid.
881 M Ravallion, D van de Walle, P Dutta and R Murgai, 'Try Telling People Their Rights? On Making India's Largest Antipoverty Program in India's Poorest State', Mimeo, World Bank, 2013.
882 Sukhtankar & Vaishnav, 2014.
883 Ravallion et al., 2013.
884 Ibid.

885 Ibid.
886 Ibid.
887 Sukhtankar & Vaishnav, 2014.
888 Ravallion et al., 2013.
889 Ibid.
890 K Ranaware, U Das, A Kulkarni and S Narayanan, 'MGNREGA Works and Their Impacts—A Study of Maharashtra', *Economic & Political Weekly*, March 28, 2015.
891 Ibid.
892 A Bhaskar and P Yadav, 'All's Well That Ends in a Well—An Economic Evaluation of MGNREGA Wells in Jharkhand', Institute for Human Development, 2015.
893 Ibid.
894 Ibid.

895 *Report of the Comptroller and Auditor General of India on the Performance Audit of the Mahatma Gandhi National Rural Employment Guarantee Scheme, 2013*.
896 Aggarwal, 2016; and Ministry of Rural Development, *MGNREGA 2005: Performance, Initiatives and Strategies (FY 15-16 & FY 16-17)*.
897 *100 Days under MGNREGA: Reality or Myth?*, Macrotrack, National Council for Applied Economic Research, January 2014.
898 Ministry of Rural Development, *MGNREGA 2005: Performance, Initiatives and Strategies (FY 15-16 & FY 16-17)*.
899 Ibid.
900 *Report of the Comptroller and Auditor General of India on the Performance Audit of the Mahatma Gandhi National Rural Employment Guarantee Scheme, 2013*.
901 Ministry of Rural Development, *MGNREGA 2005: Performance, Initiatives and Strategies (FY 15-16 & FY 16-17)*.

902 Press Trust of India, 'Revised MGNREGA wages put States in a quandary', April 3, 2016.
903 Aggarwal, 2016.
904 Ministry of Rural Development, *MGNREGA 2005: Performance, Initiatives and Strategies (FY 15-16 & FY 16-17)*.
905 Muralidharan et al., (forthcoming) *American Economic Review*.
906 Ibid.
907 Ibid.
908 Ibid.
909 Ibid.
910 Ibid.
911 Ibid.
912 Aggarwal, 2016.
913 Ibid.
914 Ibid.

14. Conclusion: Of Gray Rhinos, and Not Black Swans

915 S Baru, *1991—How P.V. Narasimha Rao Made History*, Aleph, 2016.
916 NN Taleb, *The Black Swan—The Impact of the Highly Improbable*, Random House, 2007.
917 Ibid.
918 M Wucker, *The Gray Rhino—How to Recognize and Act on the Obvious Dangers We Ignore*, St. Martin's Press, 2016.
919 Press Trust of India, 'India has the potential to take the GDP to double digits: F.M. Arun Jaitley', May 30, 2015.
920 Press Trust of India, 'India has the potential to grow at 10%: Finance Minister Arun Jaitley', April 16, 2015.
921 Ibid.
922 *The Hindu*, 'Double-digit growth difficult to achieve, says Arun Jaitley', March 17, 2016.

923 Press Trust of India, 'Indian economy will more than double to $5 trillion in few years: Arun Jaitley', June 3, 2016.
924 Ibid.
925 V Joshi, *India's Long Road—The Search for Prosperity*, Penguin & Allen Lane, 2016.
926 Ibid.
927 Ibid.
928 V Pathak, 'Our full report on education has not been published', *The Hindu*, August 26, 2016.
929 G Kingdon, 'Elephant in the room: A New Educational Policy that doesn't tackle teacher accountability won't go anywhere', *The Times of India*, August 26, 2016.

930 Joshi, 2016.
931 Kingdon, August 2016.
932 Ibid.
933 S Sukhtankar and M Vaishnav, *Corruption in India: Bridging Research Evidence and Policy Options*, Brookings-NCAER India Policy Forum, 2014.
934 Ibid.
935 Ibid.
936 Ibid.
937 Joshi, 2016.
938 Some Inputs for the Draft National Education Policy, 2016.
939 Ibid.
940 Data from the Centre for Monitoring Indian Economy.
941 Ibid.
942 Cabinet Committee on Economic Affairs (CCEA), Press Information Bureau Release, 'Backgrounder: Initiatives to Revive the Construction Sector', August 31, 2016.
943 D Joshi and V Mahambare, *HIRE & LOWER—Slowdown compounds India's job-creation challenge*, CRISIL Research, January 2014.

944 Cabinet Committee on Economic Affairs (CCEA), 'Cabinet Approves Initiatives to Revive the Construction Sector', August 31, 2016.
945 Department of Land Resources, Ministry of Rural Development, *Success Stories on the National Land Records Modernisation Programme*.
946 CCEA, 'Backgrounder: Initiatives to Revive the Construction Sector', August 31, 2016.
947 Ibid.
948 CCEA, 'Cabinet Approves Initiatives to Revive the Construction Sector', August 31, 2016.
949 G Das, *India Grows at Night—A Liberal Case for a Strong State*, Penguin, 2012.
950 *The Financial Express*, 'Construction arbitration: Narendra Modi govt makes massive move; check out what', September 3, 2016.
951 PRS Legislative Research, *Railways Budget 2016-17: Detailed Analysis*.
952 G Raghuraman, 'An Overview of the Trucking Sector in India: Significance and Structure', IIM Ahmedabad Working Paper, December 2015.
953 P Mehra, 'PMO nod for closure of sick govt. companies', *The Hindu*, September 21, 2016.
954 Ibid.
955 Baru, 2016.
956 Ibid.
957 P Svedberg, 'Reforming or Replacing the Public Distribution System with Cash Transfers?', *Economic & Political Weekly*, February 18, 2012.
958 SEWA Bharat, *A Little More, How Much It is… Piloting Basic Income Transfers in Madhya Pradesh, India*, January 2014.
959 Ibid.

960 Svedberg, 2012.
961 M Ghatak, C Kumar and S Mitra, 'Cash versus Kind—Understanding the Preferences of the Bicycle Programme Beneficiaries in Bihar', *Economic & Political Weekly*, March 12, 2016.
962 K Muralidharan and N Prakash, 'Cycling to School: Increasing Secondary School Enrolment for Girls in India', NBER Working Paper No. 19305, August 2013.
963 Ghatak et al., 2016.
964 Ibid.
965 Ibid.
966 Ibid.
967 Ibid.
968 Ibid.

969 D Kapur, 'The Shift to Cash Transfers: Running Better but on the Wrong Road?', *Economic & Political Weekly*, May 21, 2011.
970 Economic Survey of 2015-2016.
971 D Sinha, 'Cash for Food—A Misplaced Idea', *Economic & Political Weekly*, April 18, 2015.
972 Ibid.
973 Ibid.
974 Ibid.
975 Ghatak et al., 2016.
976 F Bastagli, 'Conditional Cash Transfers as a Tool of Social Policy', *Economic & Political Weekly*, May 21, 2011.
977 D Kapur and P Nangia, 'Social Protection in India: A Welfare State sans Public Goods', *India Review*, 2015.
978 I Rajaraman, 'The Entitlement State', *Business Standard*, February 11, 2013.
979 Kapur & Nangia, 2015.
980 Ibid.
981 *The Economic Times*, 'Moderate success on black money front', October 3, 2016.

982 India Abroad News Service, 'How has the latest black money scheme fared?', October 1, 2016.
983 *Outlook Money*, 'Enforcers turn defaulters'. Available at http://www.outlookmoney.com/archive/enforcers-turn-defaulters-86787. Accessed on October 13, 2016.
984 A Kumar, 'Amnesty by another name', *The Indian Express*, October 6, 2016.
985 D Seth and N Mookerji, 'Muted response to black money disclosure window', *Business Standard*, September 12, 2016.
986 S Choudhary, 'Only 15 per cent of black money came voluntarily', *Business Standard,* October 4, 2016.
987 Ministry of Finance Press Release accompanying the demonetisation decision, November 8, 2016.
988 Lok Sabha Unstarred Question No. 1711, answered by the Ministry of Finance on November 25, 2016.
989 Rajya Sabha Unstarred Question No. 1533, answered by the Ministry of Finance on November 29, 2016.
990 C Desan, *Coins Reconsidered: The Political Alchemy of Commodity Money* (The Berkeley Electronic Press, 2010). Available at http://www.bepress.com/til/default/vol11/iss1/ art13/.
991 RA Radford, 'The Economic Organisation of a P.O.W. Camp,' *Economica* 12 (1945), 189–201.
992 Desan, *Coins Reconsidered*.
993 Ibid.
994 W Bonner, *Dice Have No Memory—Big Bets and Bad Economics from Paris to Pampas*, New Jersey: Hoboken, 2011.
995 G Gopakumar, 'Printing of new Rs. 2,000, Rs. 500 notes lags demand', *Mint*, November 17, 2016.
996 Institute for Human Development, *India Labour and Employment Report*, 2014.
997 Sukhtankar & Vaishnav, 2014.

998 Ibid.
999 T Joseph, 'The real reasons for demonetisation might be hiding in plain sight', *The Indian Express*, December 19, 2016.
1000 The cash-to-GDP ratios have been borrowed from the following Bloomberg article by Elaine Ou: *India's Misguided War on Cash*. Available at https://www.bloomberg.com/ view/articles/2016-11-22/india-s-misguided-war-on-cash. Transparency International's rankings are available at https://www.transparency.org/cpi2015/#results-table.

1001 U Anand, 'Political parties can't be under RTI Act: Centre tells SC', *The Indian Express*, August 25, 2015.
1002 Press Trust of India, 'Information Commission not competent to bring political parties under RTI: Cong', June 20, 2016.
1003 D Kapur and M Vaishnav, ' *Quid Pro Quo:* Builders, Politicians and Election Finance in India', Working Paper 276, Centre for Global Development, December 2011.
1004 A Khaitan, 'Land grab. And how to make millions', *Tehelka*, October 22, 2012.
1005 M Vaishnav and R Swanson, 'Does Good Economics Make for Good Politics? Evidence from Indian States', *India Review*, September 21, 2015.
1006 Ibid.
1007 Sukhtankar & Vaishnav, 2014.
1008 Wucker, 2016.
1009 Some Inputs for the Draft National Education Policy, 2016.

Sign Up for My Newsletter

If you liked my book, you will love my newsletter – *Vivek Kaul's Diary*.

In this newsletter, I share my take on issues related to the economy and politics of the day. And as you probably noticed in this book, I don't hold back when sharing my views.

No, I am not afraid to take on the politicians, the media or anybody else who stands between you and what the data is saying.

That's why I am confident that you will love my newsletter.

It's also free.

Sign Up Now!
eqtm.in/diary

Praise for *Easy Money*

On our desk are two great books. One is David Stockman's *The Great Deformation*. The other is Vivek Kaul's *Easy Money*.
– Bill Bonner

Forget what you think you know about money and read the true, absorbing tale told by Vivek Kaul in his thorough, but fascinating, book, Easy Money. A great read.
– Al Ries, marketing guru and author of *War in the Boardroom*, *The Origins of Brands*, *The Fall of Advertising & the Rise of PR*, and many other books

This indigenous writer has written a book which is truly global in every sense. I would take the liberty of placing him in the same league as a Niall Ferguson or a Peter Bernstein, even though this is Vivek Kaul's first book.
– The Hindu

Kaul is not an economist and rightly assumes that neither are his readers. Unlike other books, which seem to have been written by one economist for other, this book is for everyone who is ready to try out a riveting cocktail of history and economics. There is no jargon to throw you off balance. Instead, the writing is simple, suave and lucid.
– *Daily News and Analysis* (DNA)

Published by:

equitymaster.com
The investor's best friend

Exclusively for Equitymaster Members. Worth Rs 2,950.

Cover by:
Manjul